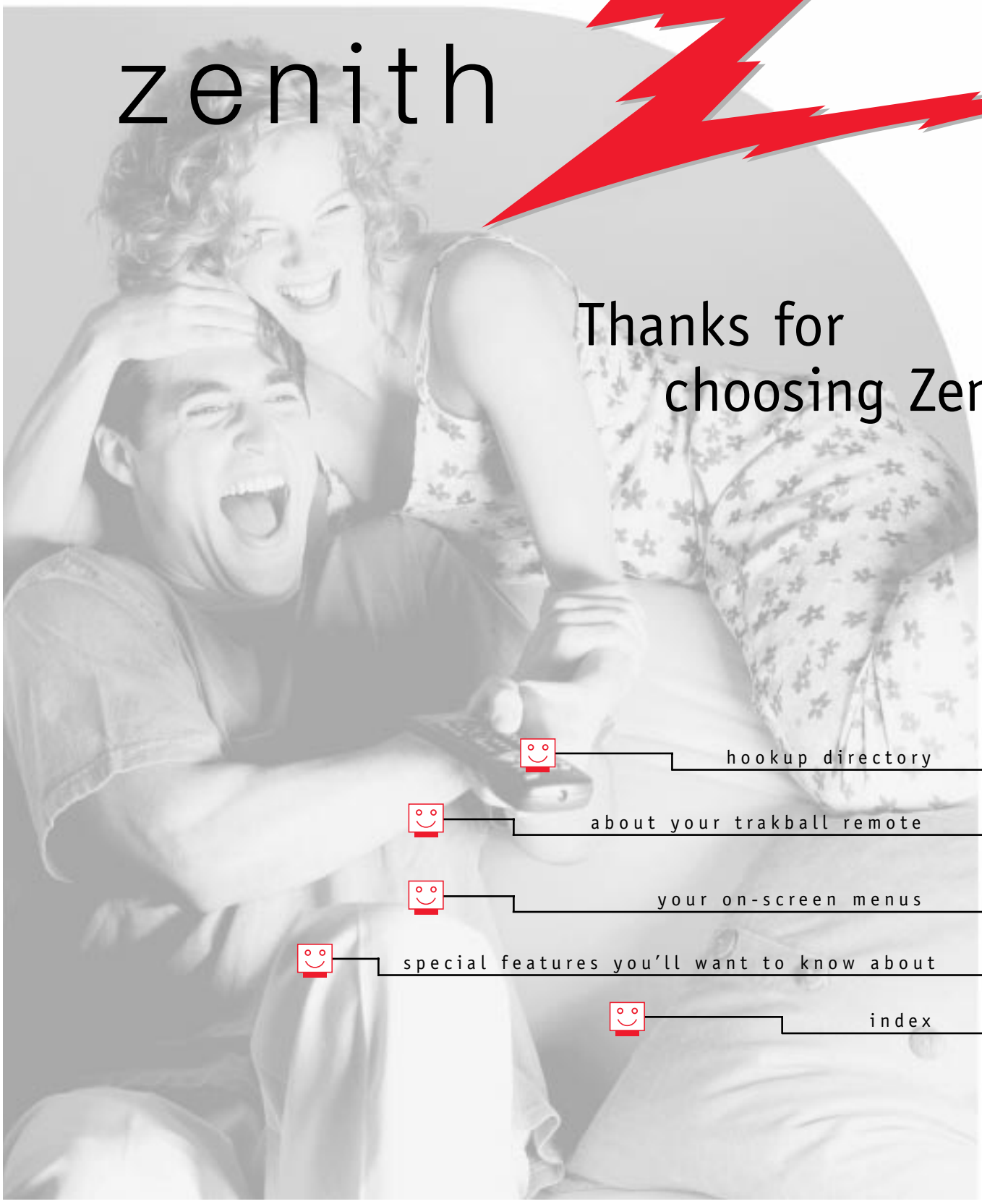
machine numbers | A60M91W | A56M91W | A50M91W

zenith



Thanks for choosing Zenith!

hookup directory page 3

about your trakball remote page 14

your on-screen menus page 18

special features you'll want to know about page 49

index page 52

operating guide / warranty

RECORD YOUR MODEL NUMBER

The model and serial number of your new TV are located on the back of the TV cabinet. For your future convenience, we suggest that you record these numbers here:

MODEL NO._____

SERIAL NO._____

WARNING:

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

To prevent fire or shock hazards, do not expose this product to rain or moisture.

POWER CORD POLARIZATION:

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

REGULATORY INFORMATION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

Hookup Directory

This page will help you hook up your Entertainment Machine properly.

IMPORTANT!! Use this page to decide where you need to begin your setup. First, find the line below that best describes what you want to do, then go to that page number.

GENERAL HOOKUP INFORMATION

About your Jacks For general information about the jacks on your Entertainment Machine, go to . . . . . pages 4

INPUT HOOKUP OPTIONS

Antenna/Cable If you are using an antenna or have direct cable service, go to . . . . . page 5

Cable Box If you are using a cable box, go to . . . . . page 6

VCR If you are using a VCR, go to . . . . . page 7

DVD Player If you are using a DVD Player, go to . . . . . page 8

AUDIO EQUIPMENT OPTIONS

Speaker Placement For general speaker placement advice, go to . . . . . page 9

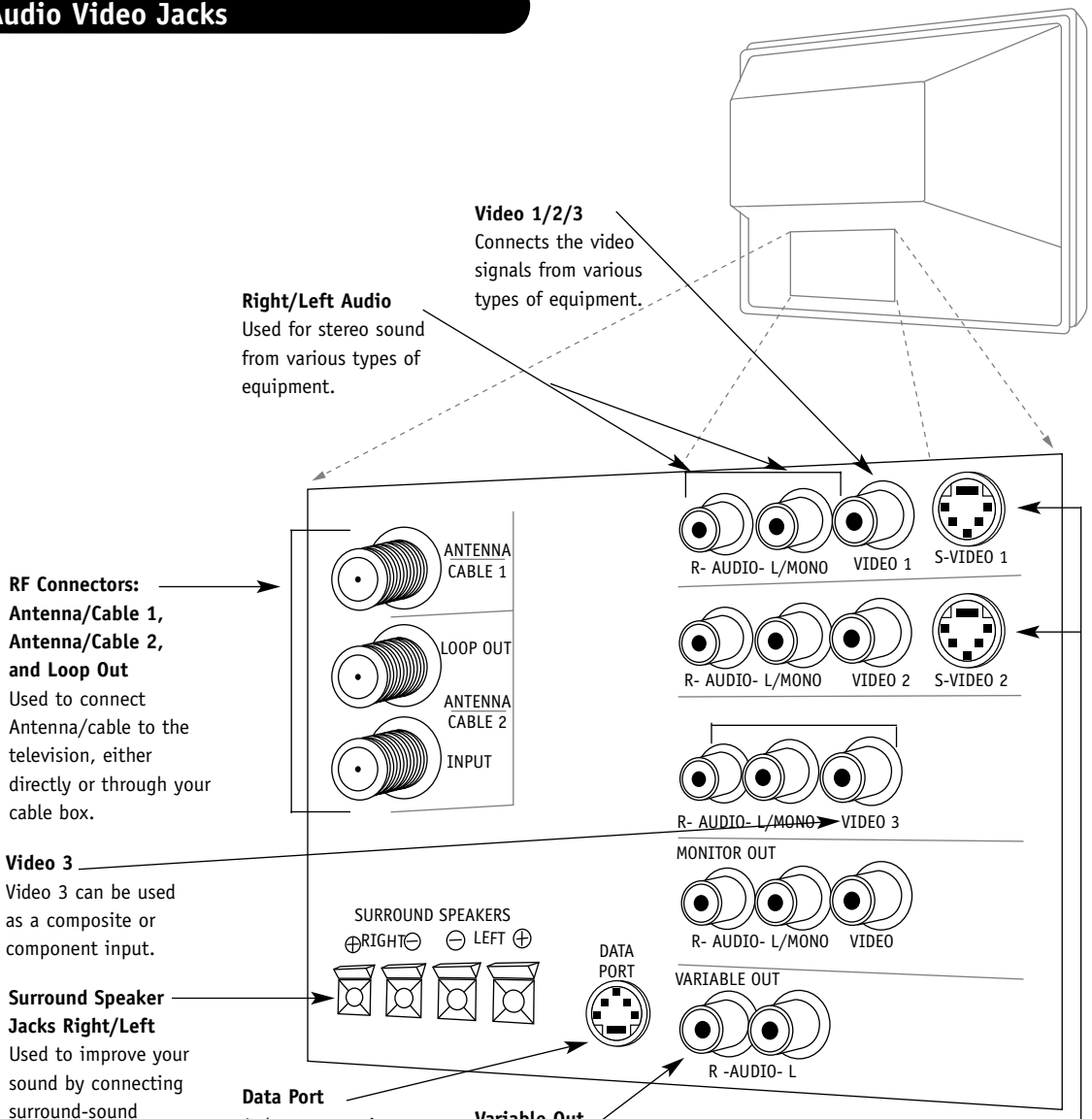
Audio Speakers To hook up your surround sound speakers, mini tower speaker or sub-woofer, go to . . . . . page 10

External Stereo To hook up your Entertainment Machine to an external stereo, go to . . . . . page 10

For a complete Index, see page 52-53.

Your jack-pack and its various uses.

Audio Video Jacks



Video 1/2/3
Connects the video signals from various types of equipment.

Right/Left Audio
Used for stereo sound from various types of equipment.

RF Connectors: Antenna/Cable 1, Antenna/Cable 2, and Loop Out
Used to connect Antenna/cable to the television, either directly or through your cable box.

Video 3
Video 3 can be used as a composite or component input.

Surround Speaker Jacks Right/Left
Used to improve your sound by connecting surround-sound speakers.

Data Port
A data connection to be used for installing a network computer. Please refer to your manual.

Variable Out
Used to connect either an external amplifier, or add a sub-woofer to your surround sound system.

S-VIDEO 1/2
A feature available with some very high-end equipment that provides even better picture quality.

Mini glossary

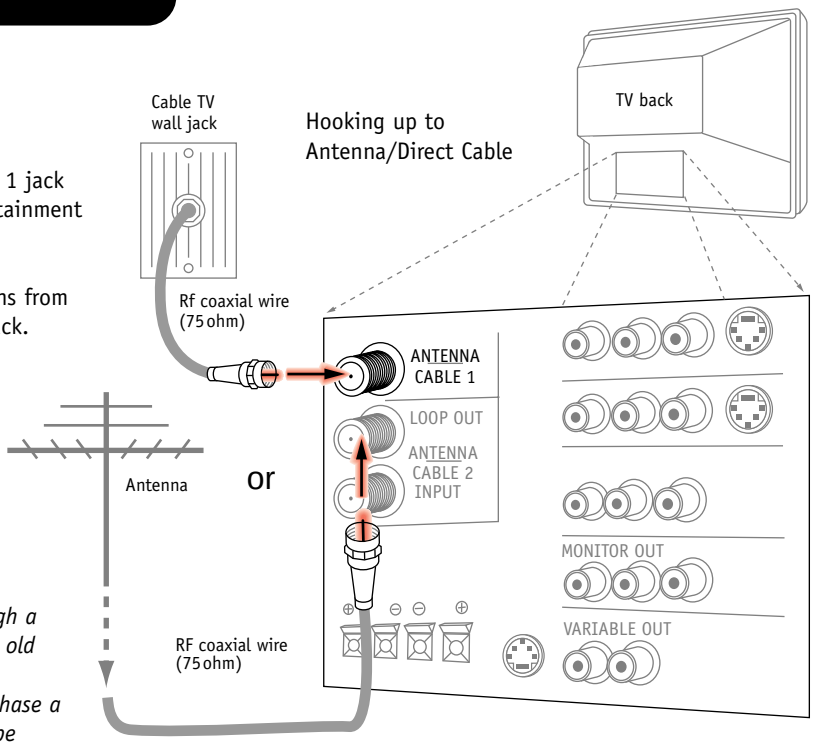
JACK	A connection on the back of a TV, VCR, or any other A/V device. This includes the RF jacks and the Audio/Video jacks that are color-coded.
SIGNAL	Picture and sound traveling through cable, or in the air, to your television screen.

Antenna/Direct Cable TV

Hooking up to Antenna/Direct Cable

1 Locate the Antenna/Cable 1 jack on the back of your Entertainment Machine.

2 Connect the cable that runs from the wall directly to this jack.



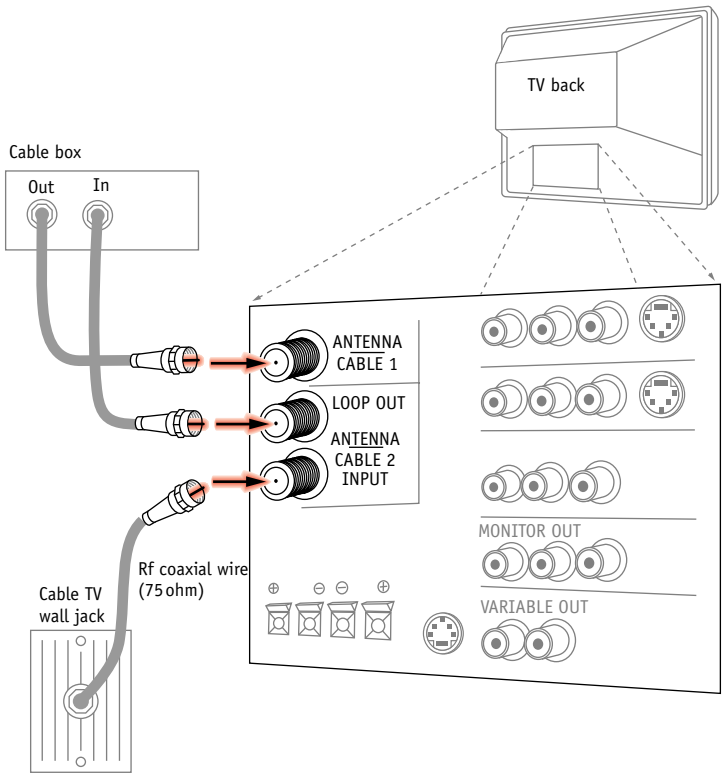
Connecting antenna/cable to your Entertainment Machine.

If you receive antenna through a flat wire that is several years old and connects with two small prongs, you will need to purchase a 300 Ohm adapter. It should be available from your local electronics dealer.

Using a cable box with the Loop Out function.

Cable Box

Some cable services require the use of a cable box to decode premium channels and pay-per-view. Using the Loop Out to Decoder option, and programming your remote, you can connect your cable box so that you only need your MBR Trakball remote to control all the channels. By connecting cable directly to your Entertainment Machine, then running it out to the cable box and back, you make the cable box another source to choose from in the Source menu (see page 20).



1 Locate the Antenna/Cable 2 jack on the back of your TV. Connect the cable that runs from the wall directly to the jack. Now find the the Loop Out jack.

2 Connect the cable from this jack to the Input jack on the back of your cable box.

3 Locate the Output jack on the back of your cable box. Connect this to the Antenna/Cable 1 jack on the back of your TV.

4 To view the premium stations, set the channel number on your cable box to HBO®, CINEMAX®, SHOWTIME®, etc. Then go to the Source menu and select the Antenna/Cable 1 source. See your Quick Setup Sheet, included with this operating guide for more information. See page 20 for information regarding Source Menus.

To view the non premium channels go to the Source Menu and select Antenna/Cable 2. Then run Channel Search to check for all available channels and store them in its memory.

This can be combined with any other equipment you may want to hook up. Hook cable directly into the TV, then to the cable box. From there, the cable box goes to the next device, down the line, until the last piece, which connects back to the TV in the Antenna/Cable 1 jack.

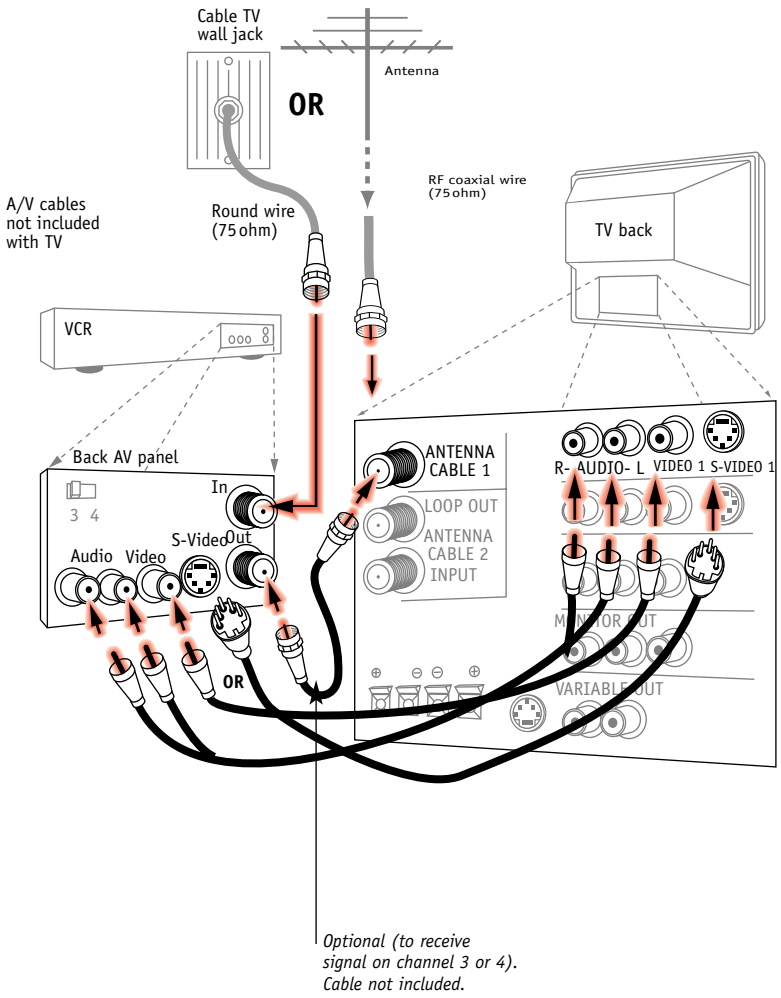
VCR

Connecting a VCR to your Entertainment Machine.

1 Locate the RF or VHF/UHF/CATV In jack on the back of your VCR. Connect the Antenna or cable wire coming from your wall directly to this jack.

2 Find the composite video or S-Video and audio jacks on the back of your VCR, and connect them following the instructions provided with your equipment.

You may connect either the composite video or the S-Video cables to your Entertainment Machine. Do not connect both the composite and the S-Video.



To hear stereo sound from your VCR, you will need to connect A/V cables.

If you want to receive your signals on Channel 3 or 4 from Antenna/Cable 1, locate the Out to TV jack on your VCR. Connect a cable from the Out to TV jack to the Antenna/Cable 1 jack on the back of your Entertainment Machine.

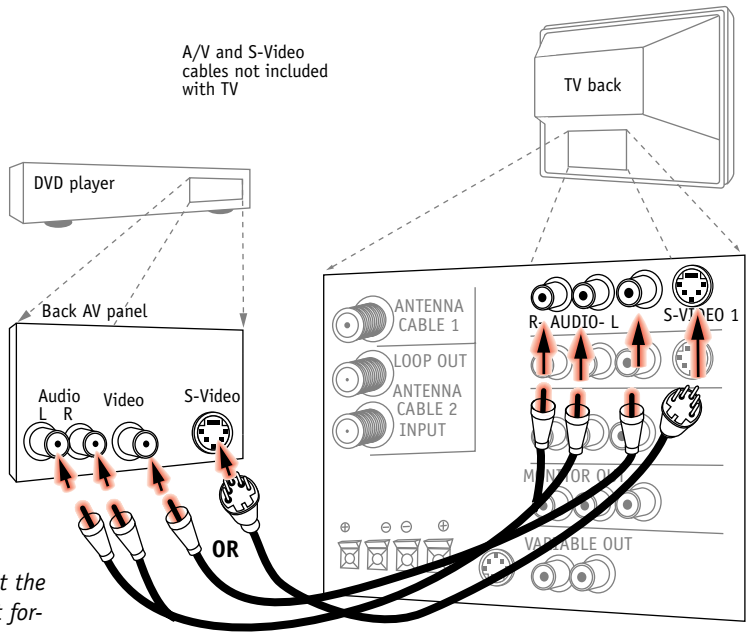
DVD Player

Connecting a DVD player or S-VHS player to your Entertainment Machine.

1

Find the audio and composite or S-Video jacks on the back of your DVD Player and connect them following the instructions provided with your equipment.

You may connect either the composite video or the S-Video cables to your Entertainment Machine. Do not connect both the composite and the S-Video.



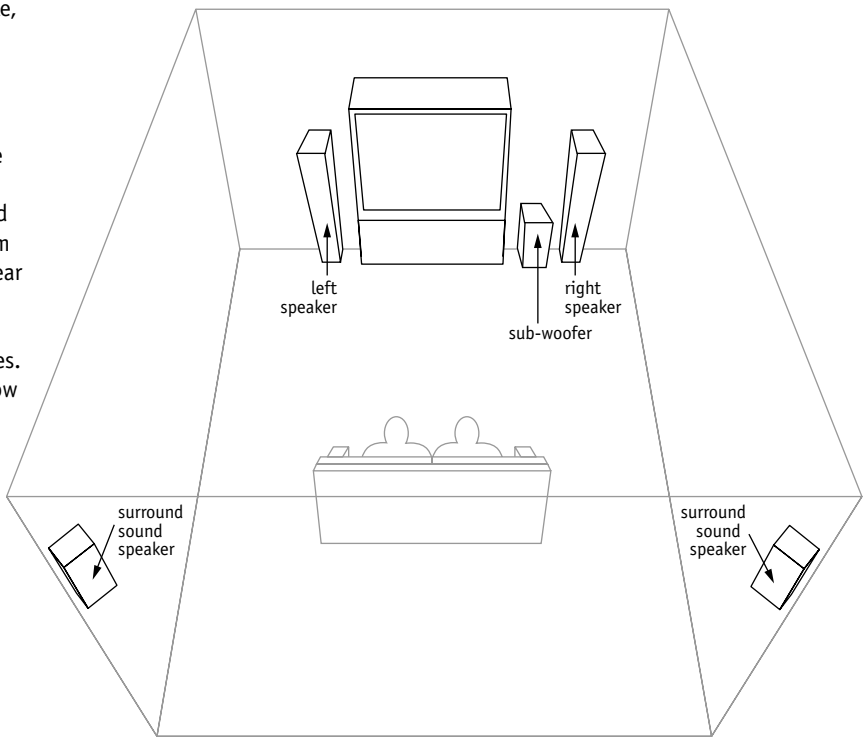
For several pieces of equipment, edit the names under Source ID so you don't forget which is which. See page 29.

Room Set-ups for Home Theater

General help on designing your home theater set-up.

This is just a general room design. Any number of set-ups are possible, and some changes may be needed to maximize your sound.

A left and right speaker on either side of the Entertainment Machine will create a phantom "center channel," making the dialog sound as though it's coming directly from the Entertainment Machine. The rear surround sound speakers provide the majority of other sounds, like those from special effects in movies. Your sub-woofer generates ultra-low frequency sound, for rumbling low-end audio.



Sound is affected by speaker placement, so make sure nothing is in front of the speakers, and that they are aimed in appropriate directions.

You have the option of turning on or off the internal speakers.

If your surround sound system is on, but there's no sound from the speakers, the program you're watching might not be broadcast in surround sound.

Get the best sound possible from your Entertainment Machine.

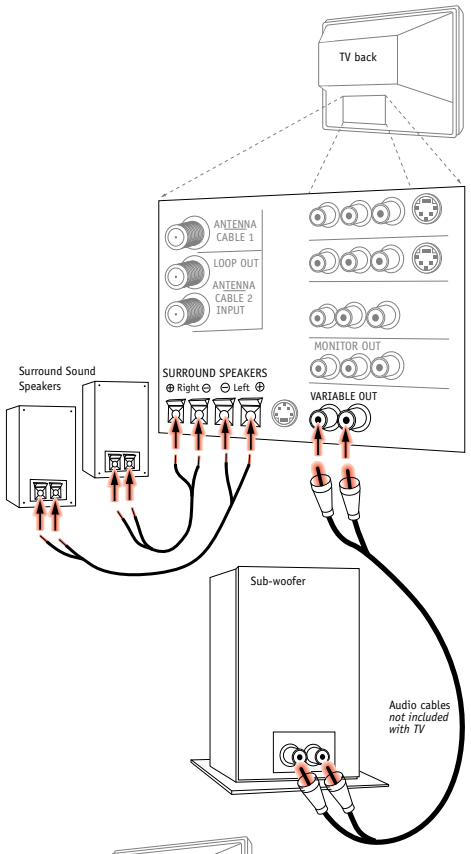
Audio Hookups

Before you begin plugging in your speakers, it's a good idea to put them in their approximate places first. That way you know how much wire you have or will need.

1 Locate the Surround Speakers jacks on the back of your Entertainment Machine. Connect the wires to the right or left channel, depending on where the speaker is located in your room. The copper wire corresponds to the Negative jack, and the silver to the Positive.

2 Locate the jacks marked Variable Out. These are for the sub-woofer. Connect the sub-woofer's cables, according to their color (red is the right channel, white the left) to these jacks.

If you happen to have Mini-tower speakers, these will be connected to the back of your sub-woofer, with the jack labeled Satellite Speaker Output.



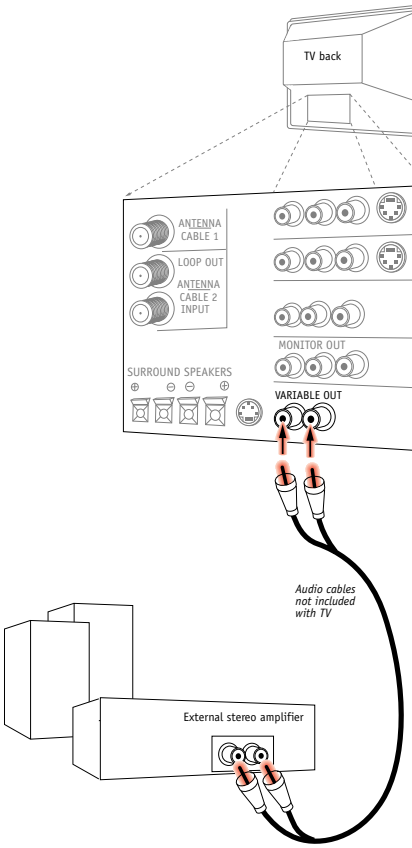
1 Locate the Variable Out jacks on the back of your Entertainment Machine and the Input jacks on the back of your stereo's amplifier.

2 Connect the two jacks, making sure that the right and left channels are placed correctly.

3 Set up your speakers through your stereo, according to those directions.

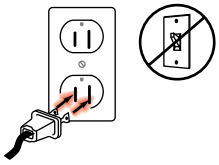
You can adjust the volume level on your external stereo system even if your remote is in TV mode. See Amplifier Volume Override on page 45.

You have the option of turning on or off the internal speakers.

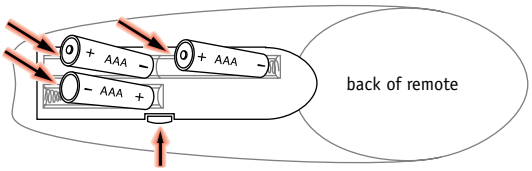


Quick Start

1 Use pages 5-10 to hook up your Entertainment Machine. Plug your Entertainment Machine into a 120V 60Hz outlet and press the Power button on the front panel. The Quick Start screen will instantly appear, with three steps you should follow if you have not yet done so.



2 Remove the back of the remote and put in three AAA batteries. Make sure batteries are properly installed (check the +/– signs).



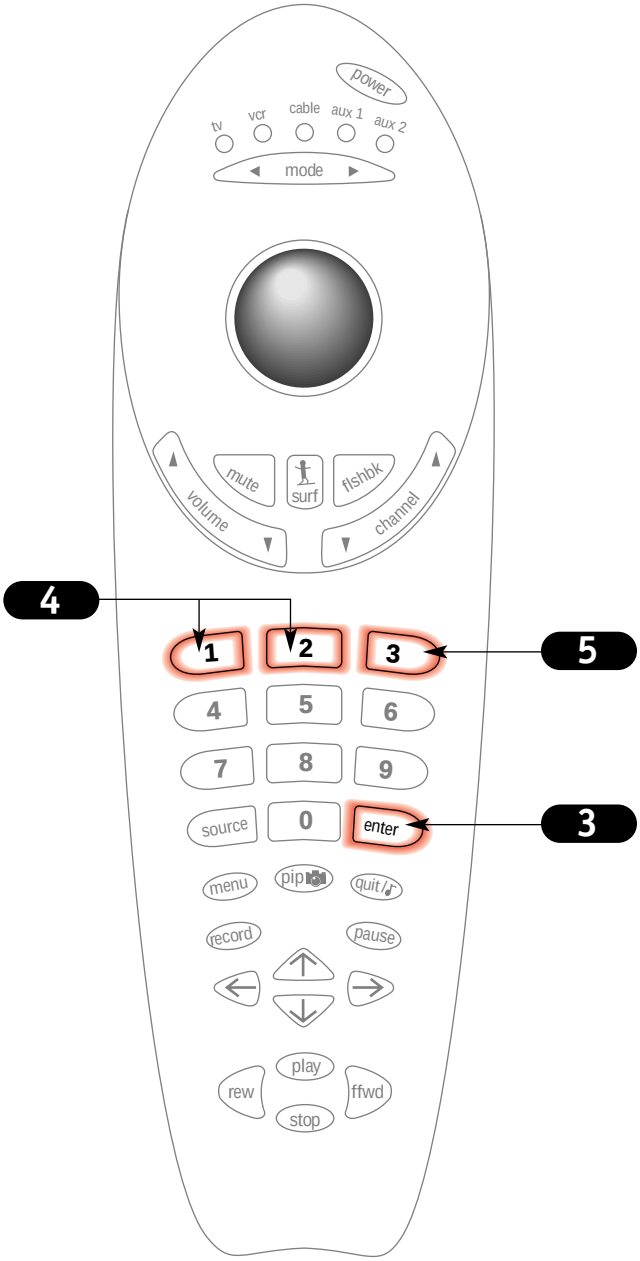
3 Click ENTER on your remote to continue the setup process.

4 Your choice will be to pick 1 or 2 (Antenna or Cable), depending on the type of input signal you have.

5 You will then be prompted to press 3 on your number pad. Your Entertainment Machine will now search for all available channels, and store them in its memory.

The Quick Start menu appears the first time you turn your Entertainment Machine on, allowing you to set your available channels before going on to other options.

The Quick Start option only works when the current source for the Main picture is Antenna/Cable 1. Once you have programmed the channels for Antenna/Cable 1 this option will not appear in the menu for another source.



Have your Entertainment Machine automatically find and save all the channels available to you.

Channel Search

Find all your available channels from any source.

This function allows you to set up the channel selection on Antenna/Cable 2. Other sources, such as VIDEO 1 and 2 won't have channels available to scan, and when they're selected as the source, the option won't even appear in the Setup menu.

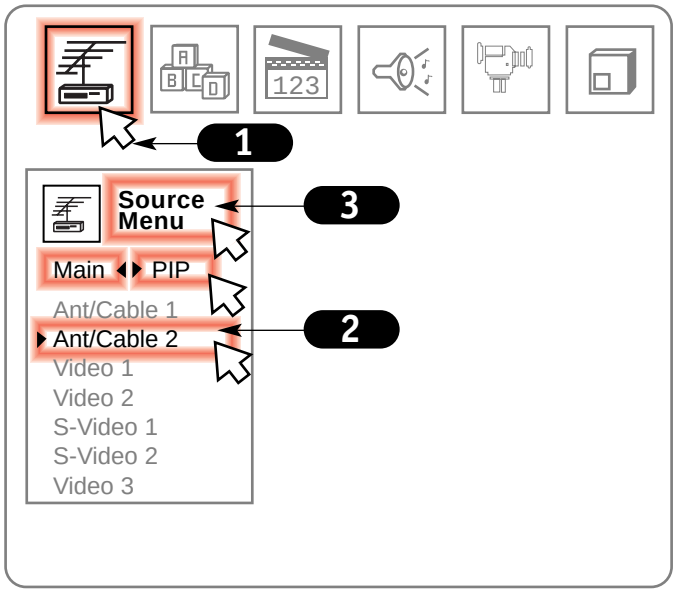
1 Click on the Source Menu icon in the Menu Display.

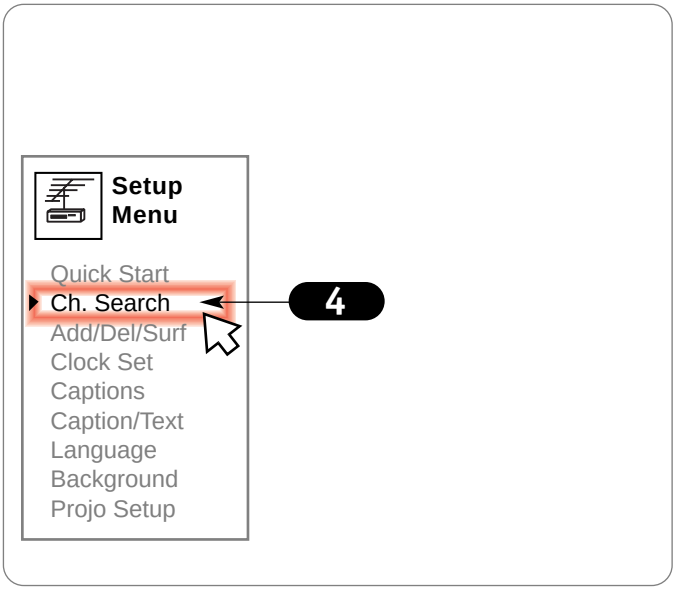
2 Click on Ant/Cable 2 to search for available channels. This will correspond either to the name on the jack pack, or any name you may have assigned it with the Source ID option (see page 29).

3 Click on the words Source Menu and your Setup Menu will appear.

4 Select Ch. Search in the menu by clicking on it once. Click it again to enter the Channel Search screen. You will be prompted to determine if the signal is coming from an antenna or cable. Select one or the other by pressing the correct number on the Number Keypad.

5 Press 3 on your number keypad to start the channel search for the source you've picked. You will automatically be returned to regular viewing.





When the screen tells you how many channels it found, click the Trakball twice to return quickly to regular viewing.

Projo Setup: Convergence

Adjust the color alignment to make your picture the sharpest it can be.

1 Click on your Setup Menu icon in the Menu Display at the top of the screen.

2 Select Projo Setup on your screen by clicking on it once.

3 Click again to enter the Convergence screen. You will see four intersecting lines. If the lines are perfectly white, your colors are fine. If you can see either blue or red lines, then one or both of those two colors needs to be adjusted.

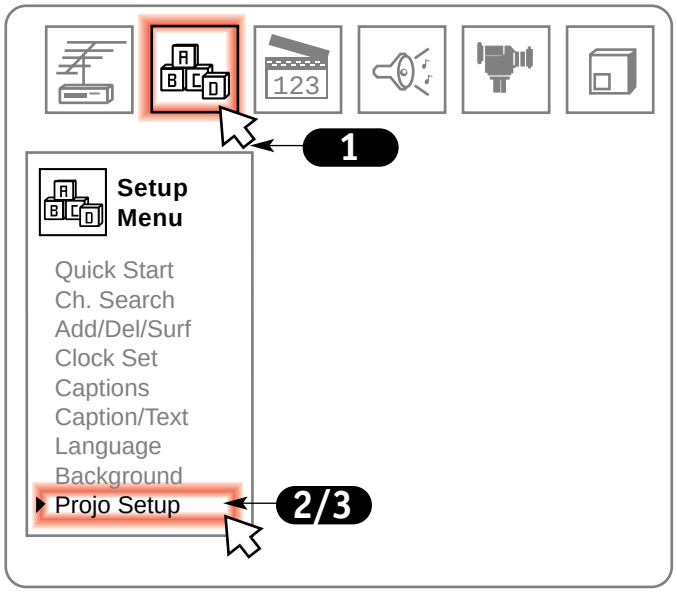
4 Click on the text across the top of the screen to select which color to adjust: Red or Blue.

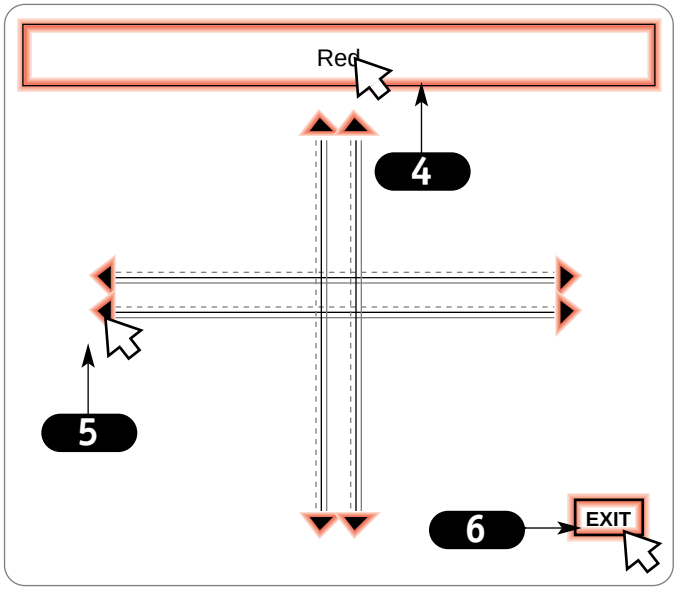
5 Using the Up/Down and Right/Left arrows on the remote, adjust the colors so the lines match on the screen and are completely white.

NOTE: Due to the small adjustments, it may be easier to use the arrow buttons on your remote, rather than the Trakball. The UP/DOWN arrow keys adjusts the horizontal lines; the RIGHT/LEFT arrow keys adjusts the vertical lines.

6 Click EXIT to return to the Setup Menu. Click on another option or on the regular screen to return to normal viewing.

If the lines never match up, no matter what you try, give Zenith's Projection TV help line a call at 1-800-365-1690.



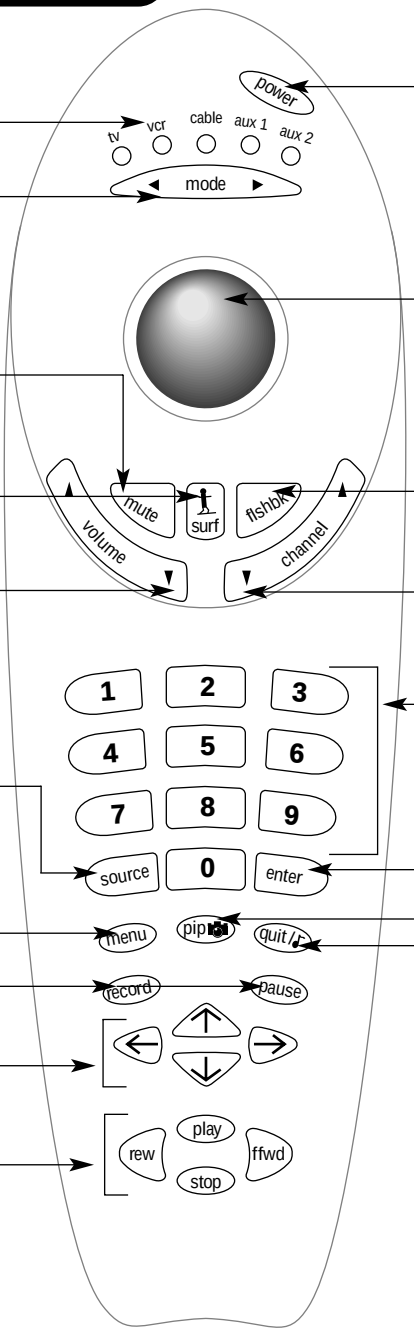


Mini glossary

CONVERGENCE This option lets you align the various colors in your picture so they look correct.

Button Functions on Your Remote

All the buttons on your remote, and what they do.



INDICATOR LIGHTS
Illuminate to show which mode your remote is in.

MODE LEFT/RIGHT
Adjust which mode your remote is working in.

MUTE
Press once for Soft Mute, again for Full Mute, and a third time to return to normal volume.

SURF
Use the regular channel selection or your customized channel Surf lists.

VOLUME LEFT/RIGHT
Increases/decreases the sound level.

SOURCE
Push to switch between available sources connected to your Entertainment Machine.

MENU
Displays on-screen menus.

RECORD, PAUSE
Control the functions on your VCR.

ARROW KEYS
Allows you to move through on-screen menu choices.

REW, FFWD, PLAY, STOP
Control the functions on your VCR.

POWER
Turn your Entertainment Machine or any other programmed equipment on or off, depending on mode.

TRAKBALL
Click and move the on-screen pointer.

FLSHBK
Return immediately to the last channel viewed.

CHANNEL UP/DOWN
Scroll through your available channels.

NUMBER KEYPAD
For direct channel selection and programming functions.

ENTER
Push to accept menu choices or after channel numbers for faster transfer.

PIP SNAPSHOT
Press to capture and freeze main picture within large PIP frame. Press a second time and receive PIP from another channel or source. Press a third time to remove PIP.

QUIT
Leaves programming menus and clears screen of displays, and provides audio swap.

Remote Control Part Number
MBR TRAKBALL: TRK 4000

Mini glossary

MODE	The mode determines the type of device (TV, VCR, Cable, AUX) that the remote is controlling.
SURF	Access a customized group of channels by pushing the surf button on the remote.

Using Your Trakball Remote

Learn the easiest way to get at every option on your Entertainment Machine!

Make sure your Entertainment Machine is on. Just click the Trakball by pressing gently with your thumb, and a hand-shaped pointer will appear.

You can now move the pointer anywhere on the screen by rolling the Trakball with your thumb. As you move it from side to side, top to bottom, different menus will appear on-screen.

You can use and adjust any of these options by rolling the pointer so the index finger on the screen is touching the icon for the menu or option you want. Click the Trakball again, and the option or menu is selected.

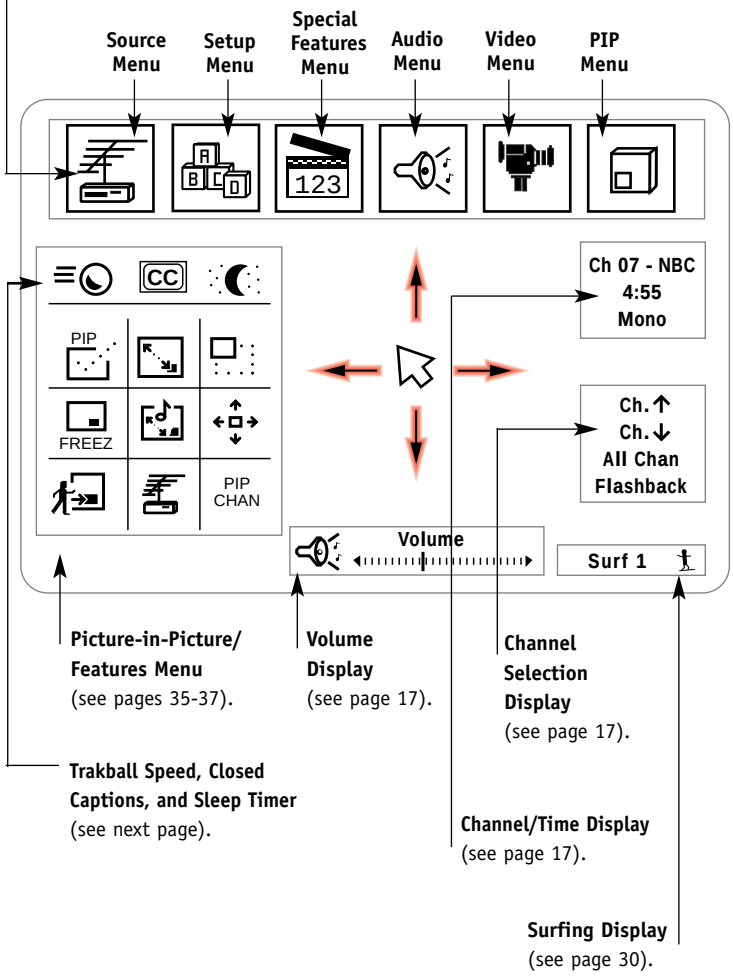
When you're finished and want to return to normal viewing, either wait a few seconds and the pointer will disappear, or move the pointer so that it isn't touching any icons or menus, and click again.

When your pointer touches certain on-screen icons, a small text window appears to the right of the pointer, telling what the icon represents.

The point-and-click interface does everything buttons do, just like your computer. Click words on-screen instead of pressing the button. Or click on items instead of scrolling with the arrow keys.

Trakball shortcut: To quickly exit any menu screen, click on the main screen — outside the borders of the menus display.

Menu Display, which lets you access the Source menu (see page 20), the Setup menu (see pages 11-13), the Special Features menu (see pages 26-32), the Audio menu (see page 33), the Video menu (see page 34), and the Picture-in-picture menu (see page 37).



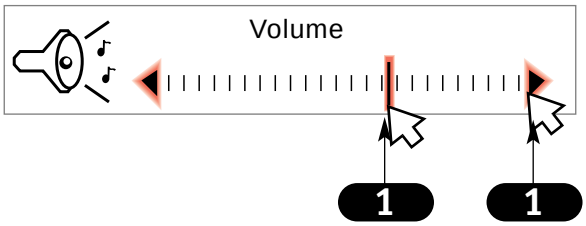
Mini glossary

POINTER	The image of the hand that appears on-screen and points to the option you want to work with.
ICON	A small picture on your screen that represents a function or menu item.

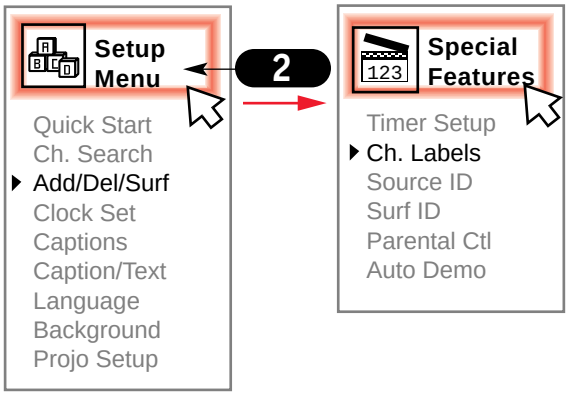
Using Your Trakball Remote, cont'd

Learn the easiest way to get at every option on your Entertainment Machine!

1 When adjusting options that are on a sliding scale, such as volume, you don't have to increase or decrease them one step at a time. Just click anywhere on the spectrum, and the setting will jump to that point. From there you can fine tune the levels by clicking on the small left- and right-pointing arrows (decrease and increase, respectively), moving the levels in small steps.



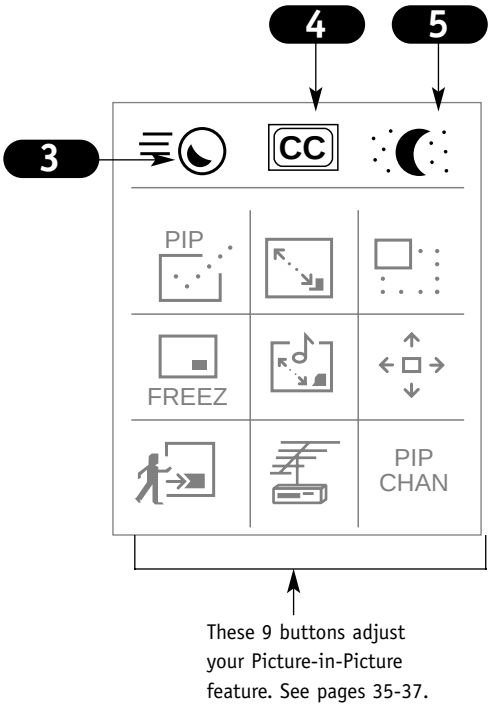
2 Just about everywhere you see text or an icon on your screen, you can probably click there to make something happen. For example, once you have one of the items from the Menu Display on your screen, such as the Setup Menu, you can just click on the icon in the upper left of that menu to cycle through the other menus.



3 You can adjust the speed your Trakball moves across the screen by clicking on the small Trakball icon at the top of the PIP/Features Menu. The higher the speed you set, the more sensitive the Trakball will be to your movements.

4 Click on this icon to view the Captions Menu. See page 23.

5 To view the Sleep Timer menu, click on this icon. See page 26.

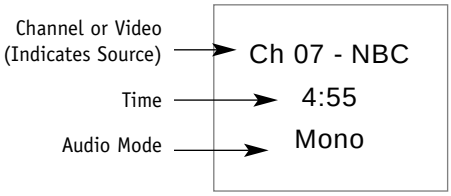


Basic TV Operation

Introducing you to the basics of your Entertainment Machine.

Source

To watch TV on antenna, cable, a VCR, DVD or any other piece of equipment, you have to make sure you've set your Entertainment Machine to the correct source. Check page 20 to see how to use the Source menu. The current source is displayed on the top line of the Channel/Time display. It will show a channel number if the source is Ant/Cable 1 or 2, and read the name of the source (such as VCR) for anything else.

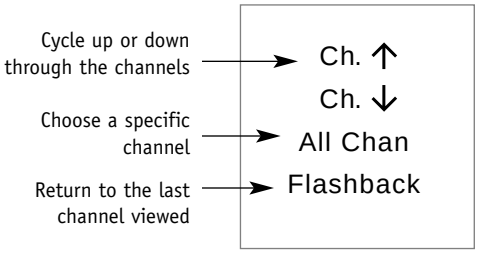


Channel Changing

Click the Ch. Up/Ch. Down text to move through the channels, or use the CHANNEL UP/DOWN arrows on your remote to move through your channel list.

Skip to a specific channel by clicking on the ALL CH text and then double-clicking on a number, or by entering the number of the channel on the NUMBER KEYPAD on your remote.

To instantly return to the last channel you were watching, click FLSHBK, or press the FLSHBK button on your remote.

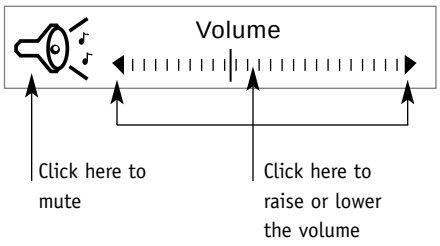


This is while the source is set to Ant/Cable 1 or 2. For any other source, such as a VCR or DVD player, the Main Picture channel changing will be controlled by that equipment.

Audio

Click on any part of the Volume bar to jump to that sound level, or click on the small arrows to move in small increments. You can also use the VOLUME RIGHT/LEFT buttons on your remote to adjust the volume level.

Clicking once on the Speaker Icon in the Volume display will put your Entertainment Machine into SOFT MUTE. Clicking again will MUTE it completely, and once more will bring the sound back. Or, using the buttons on your remote, press MUTE once to reduce the sound level to the SOFT MUTE level. Press once more to completely MUTE the sound. Press again to return to full sound level.



Mini glossary

SOURCE The term for the equipment that provides audio and video information to your Entertainment Machine. VCR, DVD players, or Cable Boxes are examples of sources.

Descriptions of all the menus on your Entertainment Machine.

On-Screen Menus

Using the Menu button on your remote or by using the Trakball, you can access all the menus below.

Menu Name		Go to page
SOURCE MENU	Choose from the available sources for both the main picture and PIP.	20
SETUP MENU	Adjust the basic characteristics of your Entertainment Machine.	11-13, 21-25
Quick Start	Automatically finds and stores active channels to flip through using Channel Up/Down.	11
Channel Search	Finds and stores active channels.	12
Add/Del/Surf	Manually pick and choose which active channels will appear when flipping through using Channel Up/Down.	21
Clock Set	Set the time yourself, or program your clock to automatically detect the time, and to adjust to Daylight Savings when you program in your time zone.	22
Captions	Turn closed captioning on, off, or set it to come on automatically when the Entertainment Machine is muted.	23
Captions/Text	Choose the captioning or text method for your Entertainment Machine.	23
Language	Pick the language you want your on-screen menus to appear in.	24
Background	Turns the background for on-screen menus transparent or opaque.	25
Projo Setup	Allows you to adjust the color convergence of your Entertainment Machine.	13
SPECIAL FEATURES	Go beyond basics and customize your Entertainment Machine's functions.	26-32
Timer Setup	Program a time for your Entertainment Machine to turn itself on or off, or to turn itself off after a certain amount of time.	26-27
Channel Labels	Label your channels with their network names (ABC, CBS, HBO, etc.).	28
Source ID	Customize the names of your sources by either selecting a label or making your own.	29
Surf ID	Design a custom channel surf selection for up to four people, and put their names on them.	30

On-Screen Menus Overview, cont'd

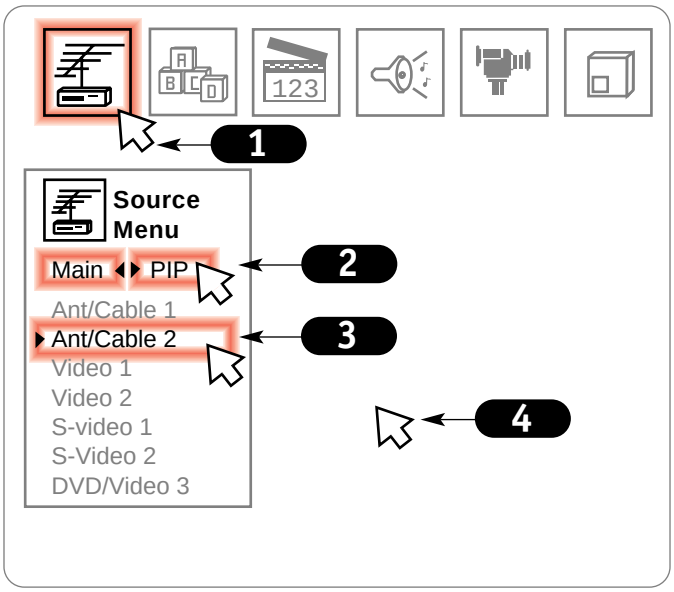
Descriptions of all the menus on your Entertainment Machine.

Menu Name (cont'd)		**Go to page**
Parental Control	Allows parents to block any channel for up to 99 hours, with the use of a password.	31
Auto Demo	Your Entertainment Machine will show you what it's capable of by running through many of its options and menus automatically.	32
AUDIO MENU	Customize the sound to suit your room and your taste. Your options are: Bass, Treble, Balance, Audio Mode, SoundRite, Front Surround, Rear Surround, BBE Audio, Speakers.	33
VIDEO MENU	Adjust your picture for any viewing situation. Your options are: Contrast, Brightness, Color, Tint, Sharpness, Color Temp, Video Filter, Skin Tone, Video Preset.	34
PIP MENU	Control the size and appearance of the PIP inset. Your options are: Contrast, Tint, Size.	37
	Using the Trakball, you have even more options. Click once and move the pointer around the screen to access these menus	15-17
Menu Display	Access any of the on-screen menus by clicking on an icon from this list.	15
Channel/ Time Display	Shows the current time, channel, video and audio source, and the Surf status.	17
Volume Display	Shows the current sound level.	17
PIP/Features Menu	Controls aspects of PIP inset and access to Trakball speed, Sleep timer and closed captioning.	16, 36

Source Menu

Choose the sources for your main picture and PIP.

This menu is where you switch input source devices so you can watch your antenna, cable TV, VCR, DVD, or anything else that you have hooked up to your Entertainment Machine. Regular antenna or cable will come through either Antenna/Cable 1 or Antenna/Cable 2, depending on how you set up your system. All other devices will correspond to the names of the jacks that they're connected to.



1 Click on your Source Menu icon in the Menu display.

2 Click on the word Main or PIP to set the signal source for that item. "Main" is for your regular picture signal, and "PIP" is for the Picture-In-Picture feature.

3 Click on the source where your signal is coming from. This listing will correspond to the jack names on the front and back of your Entertainment Machine, unless you changed the names under the Source ID option. To change the name of these labels see page 29.

NOTE: You cannot have the Main Source from Ant/Cable 1 and the PIP source in Ant/Cable 2 or vice versa. PIP must be the same Ant/Cable source as the main or one of the video sources.

4 Click on the regular screen to return to normal viewing.

Repeat these steps to set the signal source for your PIP feature.

Mini glossary

SOURCE The term for the equipment that provides audio and video information to your Entertainment Machine. VCR, DVD players, or Cable Boxes are examples of sources.

Add/Del/Surf

Create your own channel selection for cooler surfing.

1 Click on the Setup Menu in your Menu Display.

2 Click on Add/Del/Surf in the menu. Click on it again and your screen will be replaced by a large blue one with a full channel listing.

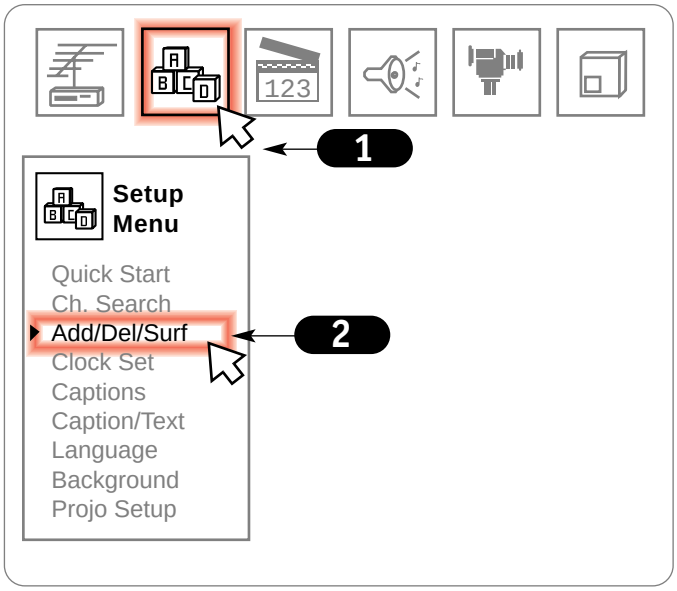
3 Click on the channel number you wish to modify (add/delete to your channel list). Click on channel number again to add or delete from your listing.

4 Click on the No Surfing text to change to a Surf channel listing (Surf 1, Surf 2, etc.).

5 Click on the channel number you wish to modify (add/surf to your channel list). Click on the channel number again to add it to your Surf listing. Note: Dark grey channels (deleted channels) cannot be changed.

6 Cycle through your other Surf modes (Surf 2, Surf 3, etc.) and repeat steps 4 and 5 to set up additional Surf channel listings.

7 Click on EXIT to return to the Setup Menu. Click on another option or click on the regular screen to return to normal viewing.



Deleted channels will appear in a gray color, while Added ones will be in white.

Surfed channels will have a pink surfer icon next to them.

Instead of "Surf 1" or "Surf 2," customize the name of your program listings. See Surf ID on page 30.

Mini glossary

ADD	This function lets you add new channels to the list that you'll scroll through when using your remote.
DELETE	This function lets you remove channels that you don't watch from the list you'll scroll through.
SURF	This function creates a customized list of your favorite channels. You can access this group of channels by pushing the surf button on the remote or by clicking on the Surfing display (see page 15).

Clock Set

Set the clock or have it done for you, automatically. REALLY impress your friends.

1 Click on your Setup Menu icon in the Menu Display.

2 Click on Clock Set in the menu. Click it again to reach the Clock menu.

3 Click on Clock Mode in the menu. Click again and a display will appear at the bottom of your screen.

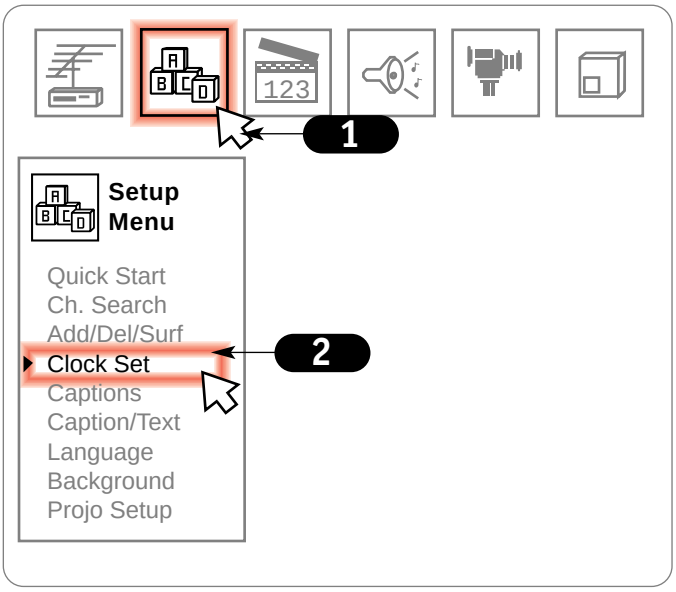
4 Choose either Auto or Manual for clock mode. Manual will let you set the time yourself while Auto will set it for you while your Entertainment Machine is off.

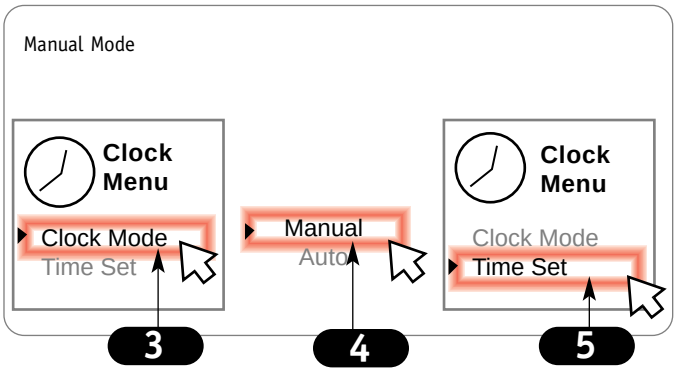
5 **Manual:** Choose Manual, then click on Time Set twice, where you can set the time by clicking on the HH:MM AM/PM display to cycle through the times.

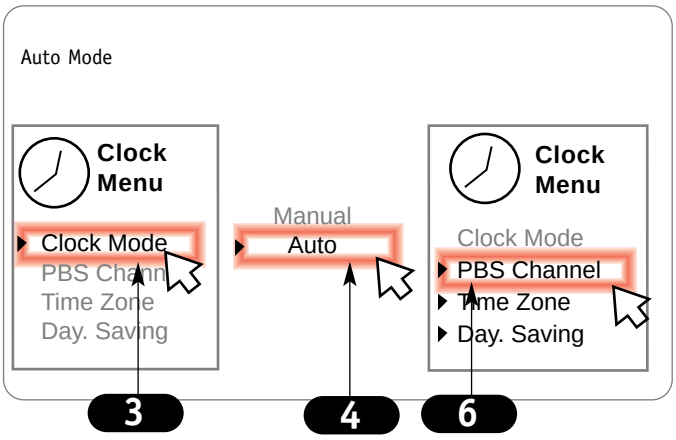
or

6 **Auto:** Choose Auto, then click on PBS Channel, then use the NUMBER Keypad to enter the PBS Channel. Your current channel will change to that station.

7 Turn off your Entertainment Machine for ten seconds to activate the correct time.







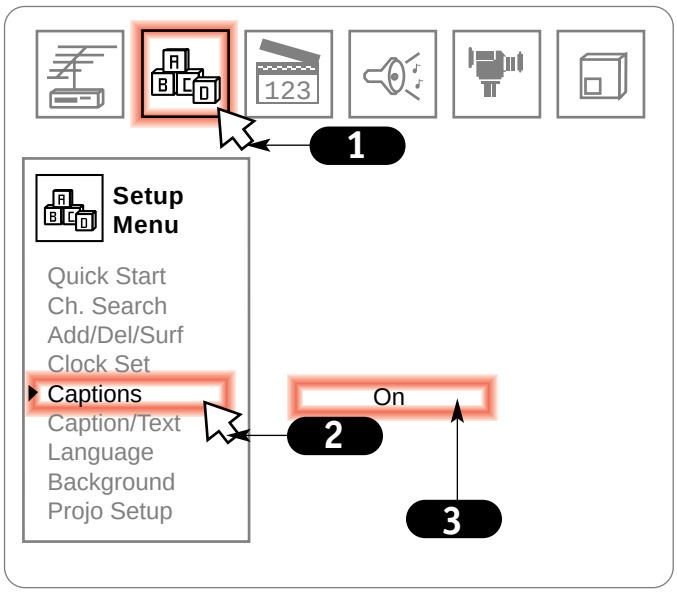
Embedded in the PBS broadcast signal is the information for the correct time and date. Your Entertainment Machine will read that information and automatically display the right time.

If you follow these steps and your time is still one hour off, check your Time Zone and Daylight Savings Time within your Entertainment Machine to make sure they are properly set.

Captions and Caption/Text

Turn closed captioning or text on, off, or have it appear automatically.

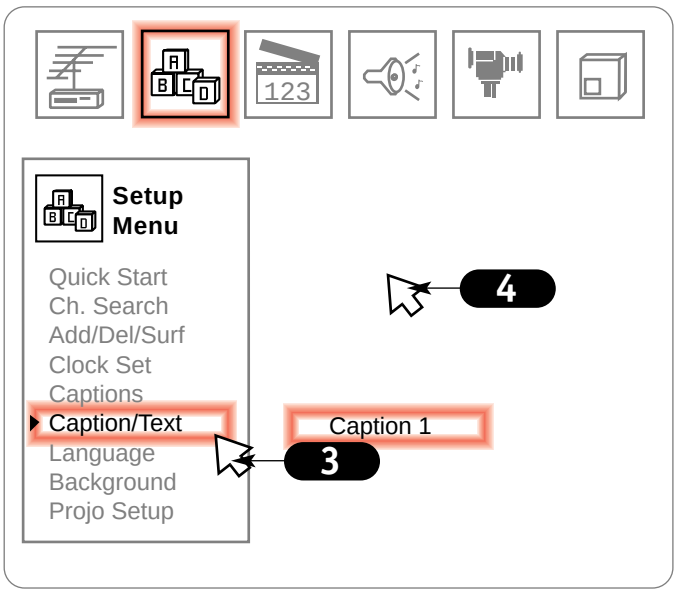
1. Click on your Setup Menu icon in the menu display.
2. Select Captions in the menu by clicking on it. Click on it again to choose whether you want the captions Off, On or Caption When Muted.
3. Select Caption/Text from the menu by clicking on it. Click again to choose which type of captioning or text you want.
4. Click on the regular screen to return to normal viewing.



Choose Caption 1 to view traditional Closed Captioning.

With the Trakball, you can also go to the PIP/Features menu and click on "CC" to enter the Captions menu. See page 16.

Not all programs have captions.



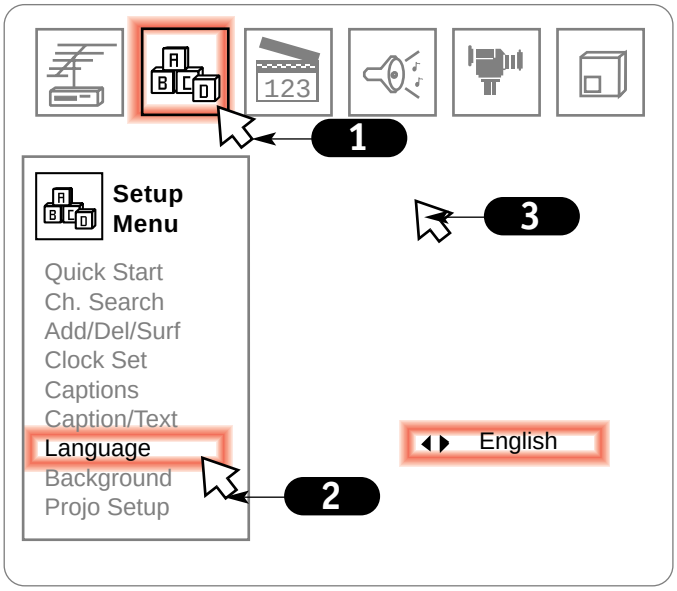
Mini glossary

CAPTIONS	A form of subtitling that displays written dialog for your program.
TEXT	Arbitrary text not related to the program.
CAPTION WHEN MUTED	Sets captioning to come on automatically when your volume is soft muted or muted.

Language Menu

Choose what language your on-screen menus appear in.

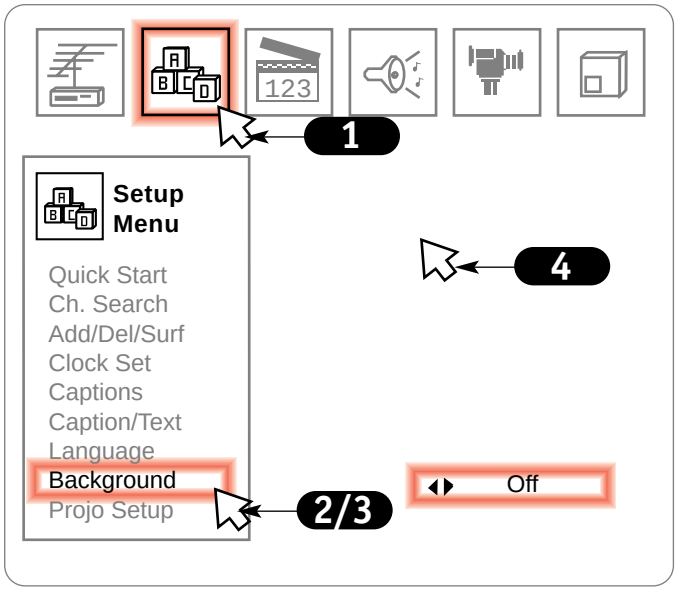
1. Click on your Setup Menu icon in the menu display.
2. Select Language by clicking on it. Click again to choose the language you want by clicking on English, Spanish, or French.
3. Click on the regular screen to return to normal viewing.



Background

Customize the look of your on-screen menus.

1. Click on your Setup Menu icon in the menu display.
2. Select Background by clicking on it in the menu.
3. Choose whether you want an opaque background Off or On by clicking on it again.
4. Click on the screen for normal TV viewing.



Turning your Background On makes reading the menus easier.

Timer Setup: Sleep Timer

Have your Entertainment Machine go to sleep any time.

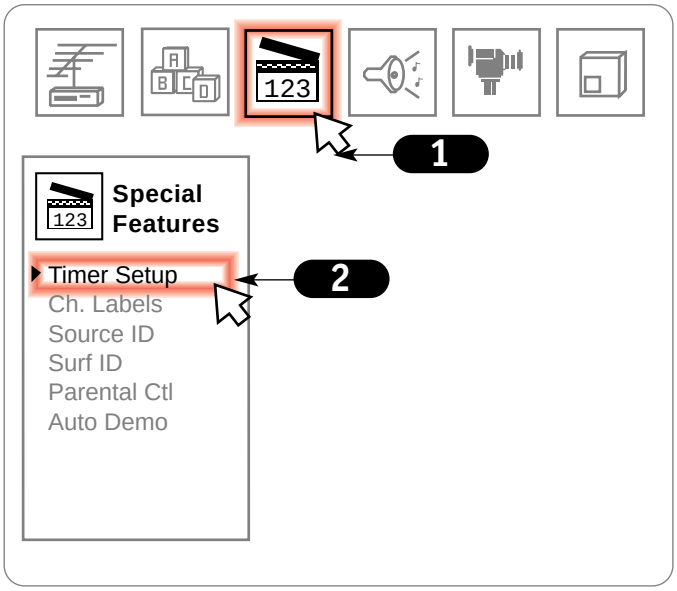
1 Click on your Special Features Menu icon in the menu display.

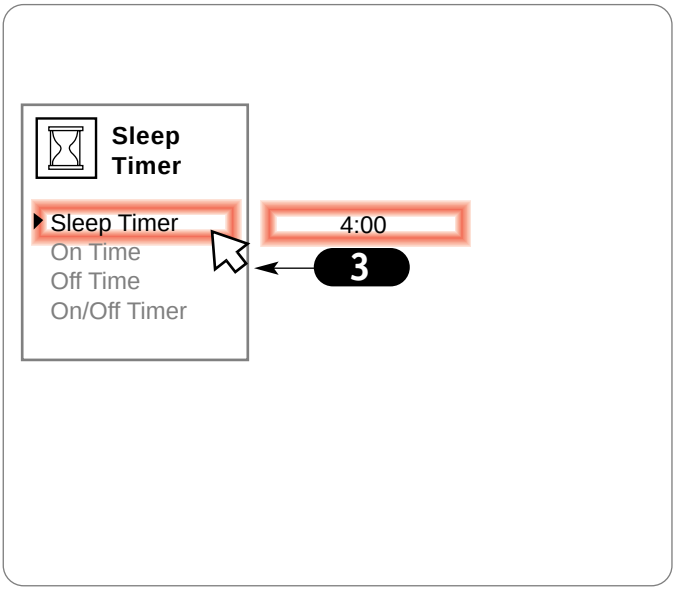
2 Select Timer Setup in the menu by clicking on it. Click on it again and the Timer Menu will appear, replacing the features Menu.

3 Click on Sleep Timer in the menu to highlight the feature. Click it again to specify an amount of time before your Entertainment Machine turns itself off. You can increase or decrease the amount of time in increments up to four hours.

Note: To turn the feature off, you must cycle through the times until Off appears.

4 Click on the screen to return to normal TV viewing.





The sleep timer can also be accessed by the moon and stars icon on the top of the PIP/Features menu. See page 16.

As the Good Night Display counts down the final 60 seconds, the audio and video of the Entertainment Machine "dim" for a soft discreet turn-off.

Timer Setup: On/Off Timer

Have your Entertainment Machine wake up and go to sleep any time.

1 Click on your Special Features Menu icon in the menu display.

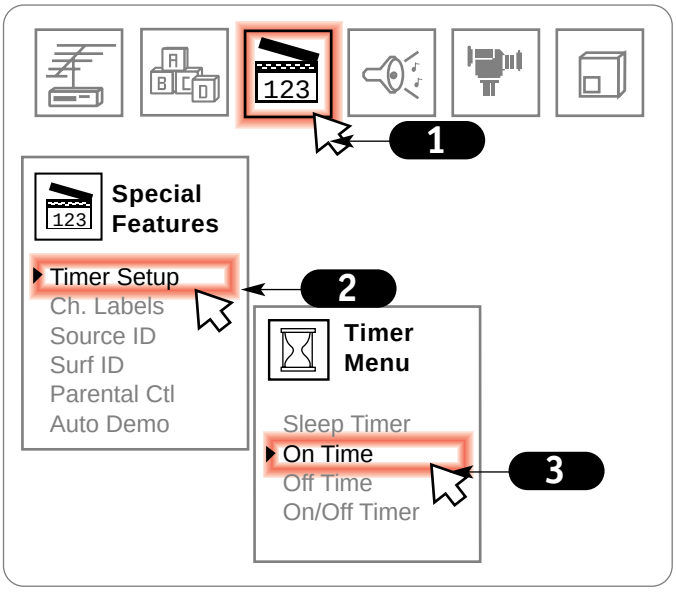
2 Select Timer Setup in the menu by clicking on it. The Timer Menu will appear, replacing the Special Features menu.

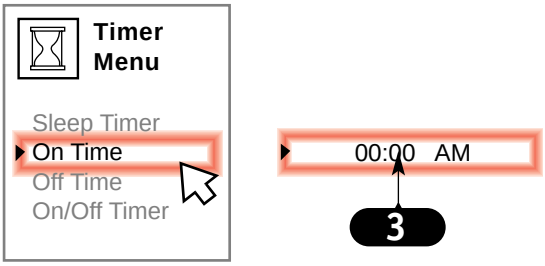
3 Click on On Time first to highlight the feature and a second time to set the time your Entertainment Machine turns itself on. The number appears in the form (HH:MM AM). Select the amount time by clicking on the digits. To change the AM or PM, simply click on AM/PM.

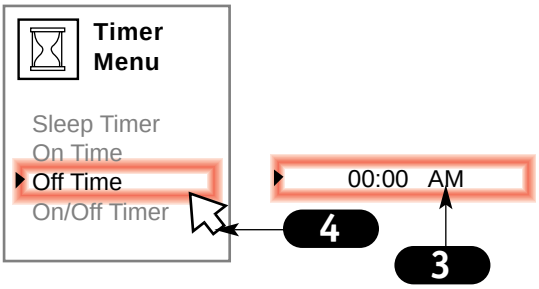
4 Click on Off Time to highlight the feature and a second time to set the time your Entertainment Machine will turn itself off. Repeat step number 3 to enter an Off time.

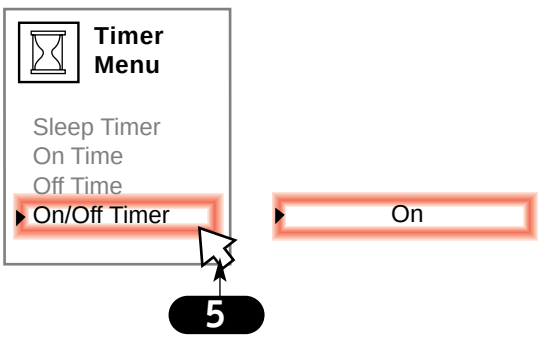
5 Click on On/Off Timer to decide if your Entertainment Machine will observe the times you entered above. Select ON and it will shut off and turn on at the specified times.

6 Click on the screen to return to normal TV viewing.









To activate the On/Off Timer, you must set an Off Time. The On time is optional.

To select Timer Setup you must set the time on your Entertainment Machine.

Channel Labels

Choose preset labels for channels or create your own.

1 Click on your Special Features icon in the menu display.

2 Select Ch. Labels by clicking on it. Click again and a blue screen will fill with a list of possible channel labels. The current channel will appear in the upper-right corner inset.

3 Choose a channel to label with the Channel Up/Down display on the right side of your screen.

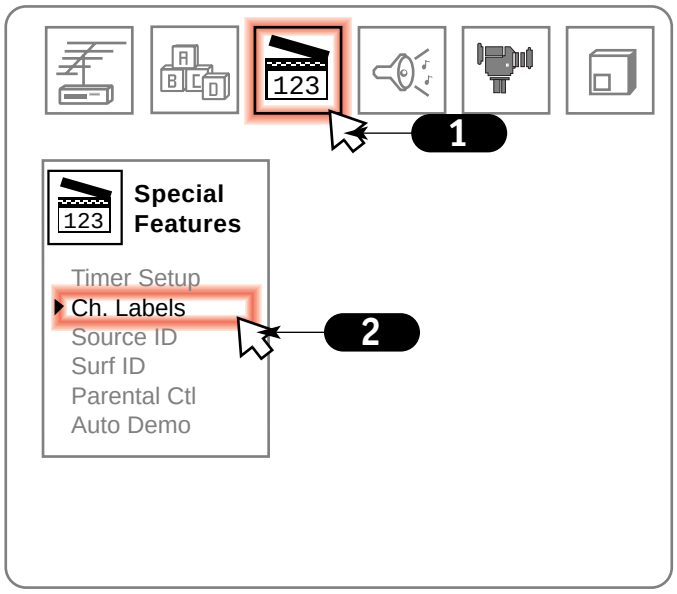
4 Choose a label for the channel by clicking on it.

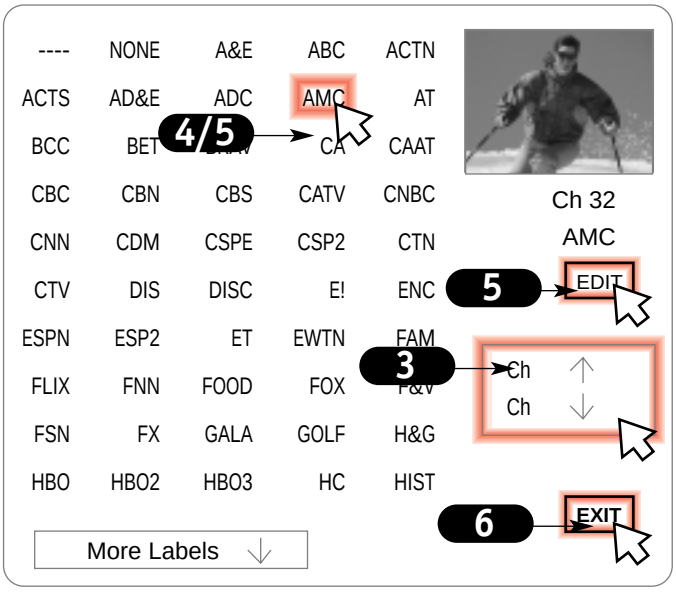
NOTE: The (----) label indicates that your TV will accept the original, broadcast label if sent by the broadcaster, and (None) will block all labeling.

5 To edit any of the labels, click on the label again or select EDIT at the right side of the screen. Another screen will appear with the alphabet. Click on any of up to four letters, then click EXIT to return to the Channel Label screen.

6 Click EXIT to accept the label and return to the Special Features menu. Click on the regular screen to return to normal viewing.

If you watch cable with a cable box and have your channel set to 3 or 4, you should set the label to None.





Source ID

1 Click on your Special Features Menu icon in the menu display.

2 Select Source ID by clicking on it. Click it again to enter the Source ID menu. Your screen will be replaced by a blue one that lists all the sources and their current labels.

3 Select the Source name you want by clicking on it. Click repeatedly on the label to cycle through all the available names.

Note: The (– – –) label indicates that your source name will be the default name shown in the source column.

4 If you don't see a name that you want, click on EDIT to enter the label edit screen. A customizable alphabet feature will appear. To customize the name, click on the letters of the name you want (up to 10 characters). Click on EXIT to return to the Source ID screen.

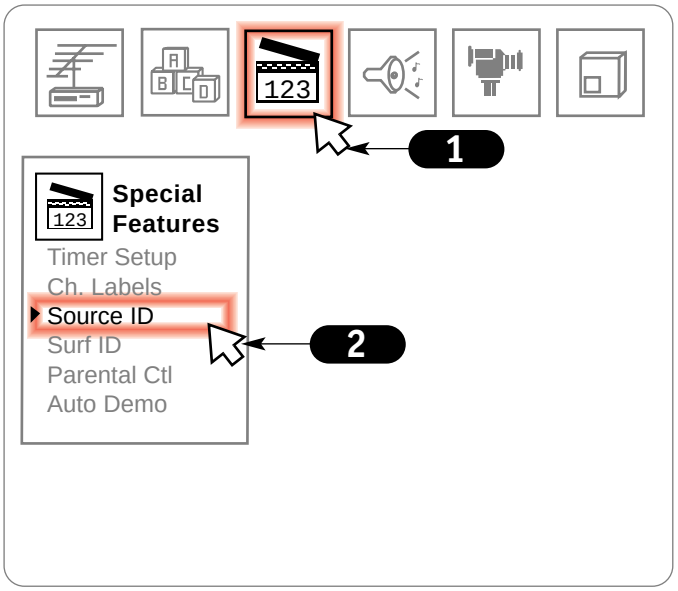
5 When you're done, click on EXIT to return to the Special Features menu.

6 Click on another selection, or on the regular screen to return to normal viewing.

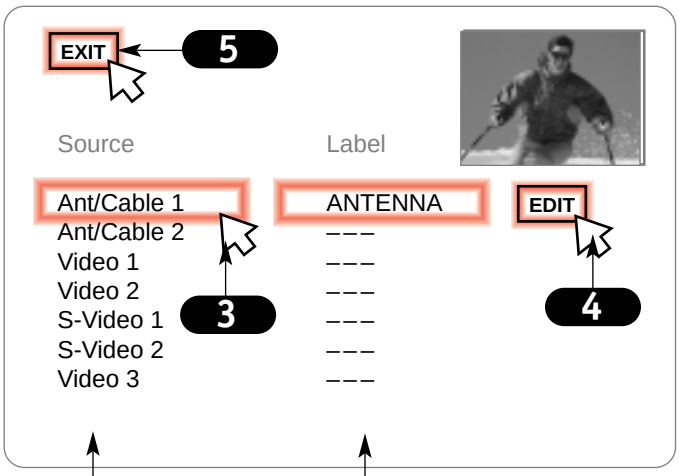
Source IDs can be edited and re-edited every time you rearrange your equipment. Make sure to keep track!

Sources can be disabled by choosing that option under label so they will not appear in the source menu or when pressing the source button.

If you want to return a label to the default name, edit the name using all spaces in place of letters.



Name the sources for the Entertainment Machine with Source ID.



The titles under Source will correspond to the jack labels on the back of your Entertainment Machine.

The titles under Label will change as you click on the source name. If the dashes are chosen, the source name will be the default name as it appears above (under the Source).

Surf ID

Customize the names of your surf channel lists for up to four people.

1 Click on your Special Features Menu icon in the menu display.

2 Click on the Surf ID item in the menu. Click again and your screen will be replaced by a blue one, showing all your available surf lists.

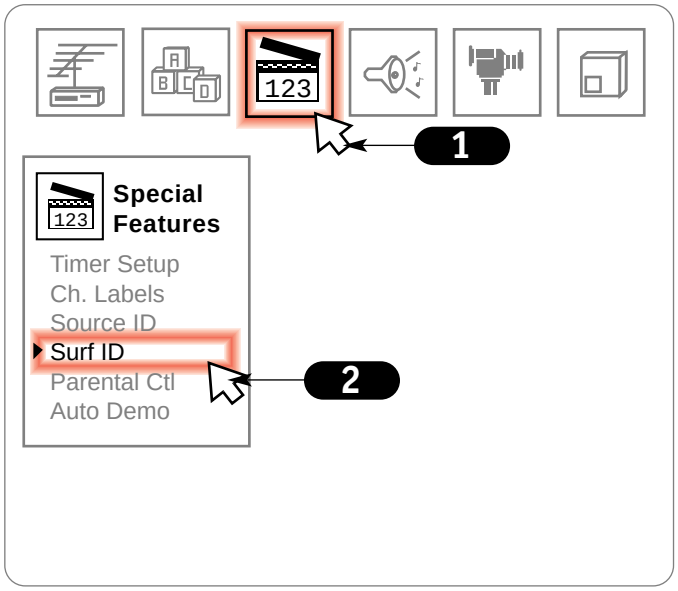
3 Highlight the Surf channel list you want to edit by clicking on it. Click repeatedly on the label to cycle through the available names.

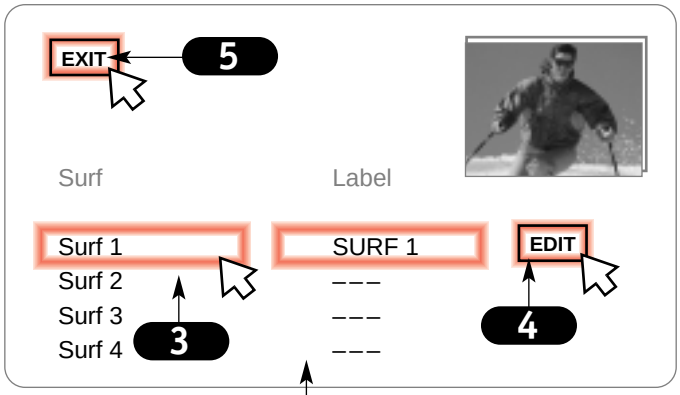
Note: Be sure to indicate the specific channel list you wish to edit. For example, Surf 2 should be selected if Surf 1 has already been edited.

4 Click on EDIT to enter the label edit screen. An alphabet, including some symbols will appear. Spell out the name you want by clicking on one letter after the other (up to 10 characters). Click on EXIT to return to the Surf ID screen.

5 Click on another Surf channel list to continue editing, or click on EXIT to return to the Special Features Menu. To program Surf 2, 3, and 4, click on those specific options and repeat steps one through four above. See page 21 for additional information.

6 Click on another option, or click on the regular screen to return to normal viewing.





The titles under Label will change as you click on the Surf name. If the dashes are chosen, the Surf name will be the default name as it appears above (under the word Surf).

If you want to return a label to the default name, edit the name using all spaces in place of letters.

Customized surf channel lists can be disabled by choosing that option under label so they will not appear in the surfing display when pressing the surf button.

Parental Control

Determine the channels and video your kids can access.

1 Click on your Special Features icon in the menu display.

2 Select Parental Ctl. in the menu by clicking on it. Click again to enter the parental control menu (Par. Ctl).

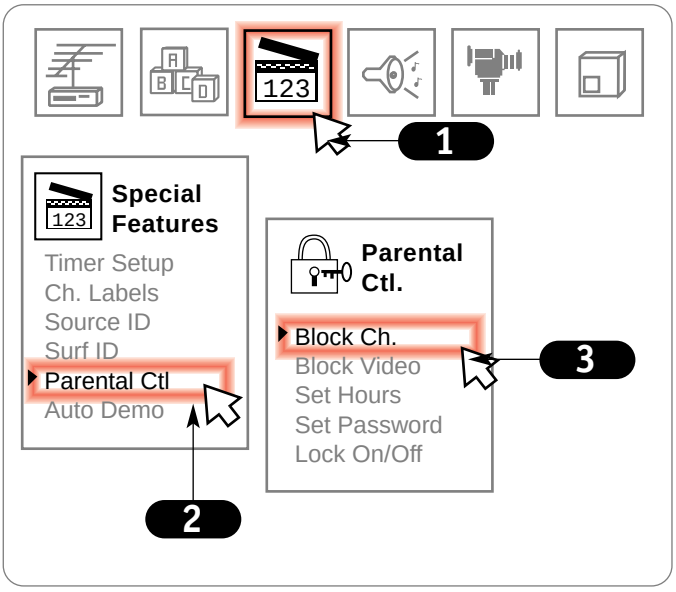
3 Click on Block Ch. and the screen will be replaced by a blue screen listing all of your available channels. Click on the channel numbers that you wish to block. The screen lists the channel as Unblocked. Click on the channel again and it will read Blocked. Click EXIT to return to the parental control menu.

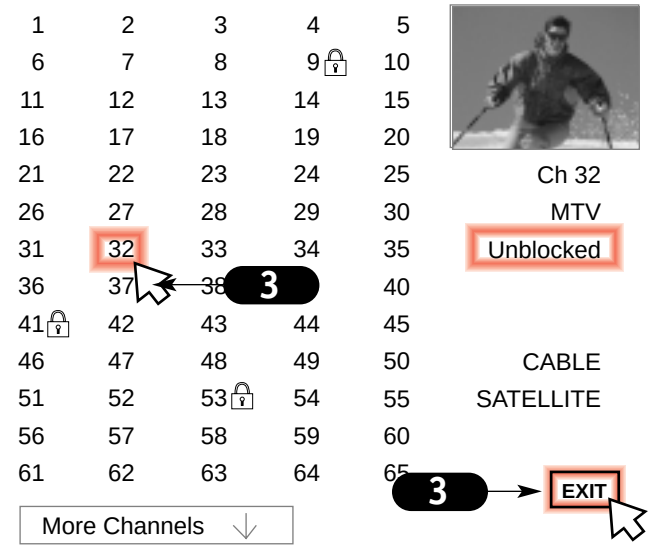
4 Click Block Video and you will be given the option to block all Video inputs except Ant/Cable 1 and 2.

5 Select Set Hours in the menu by clicking on it. Click again to set the amount of time you want the channel blocked for: 1 to 99 hours. Click on arrows to increase or decrease the time.

6 Click on Set Password twice to choose a number that will protect the channel. A display will appear on the bottom of your screen, prompting you to enter a four-digit code. Click on any four numbers from the list, or enter a number using the NUMBER KEYPAD on your remote. After you enter it once, you must enter it again to verify it. After you verify the password, the screen automatically displays Lock On/Off

7 Click On or Off to have your Entertainment Machine enable the channel blocking (On), or to ignore it (Off).





If you do not set the hours or password, you will not be able to enable the blocked feature.

Should you forget the password you activated, parental control will automatically deactivate when the preset time expires, which cannot be adjusted.

To unblock Parental Control feature on the Special Features menu and enter your password, then set lock to Off.

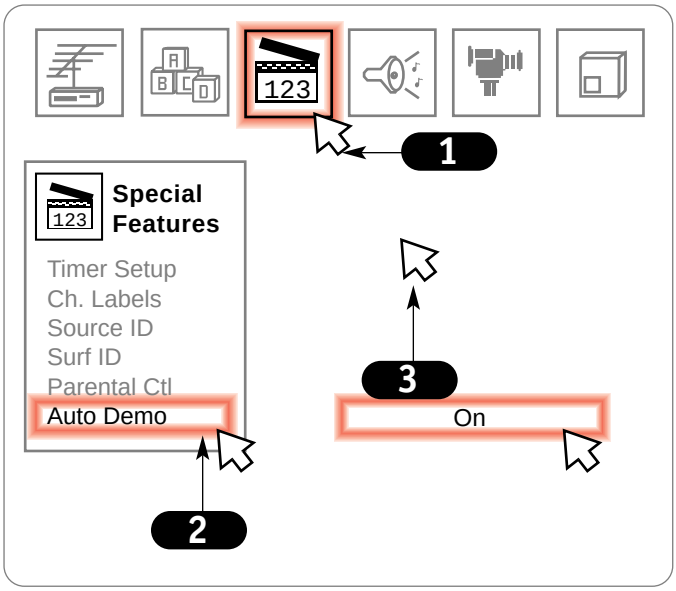
Your Entertainment Machine will show you all your menu options.

Auto Demo

1 Click on your Features Menu icon in the menu display.

2 Select Auto Demo in the menu by clicking on it. Click on it again to choose whether you want the Auto Demo On or Off.

3 Click on the regular screen to have the Auto Demo begin.



Auto Demo displays many of the menus and displays your Zenith Entertainment Machine has, showing you the layout and location of your options.

To let you know it's running, Auto Demo places an animated icon in the upper-right corner of your screen.

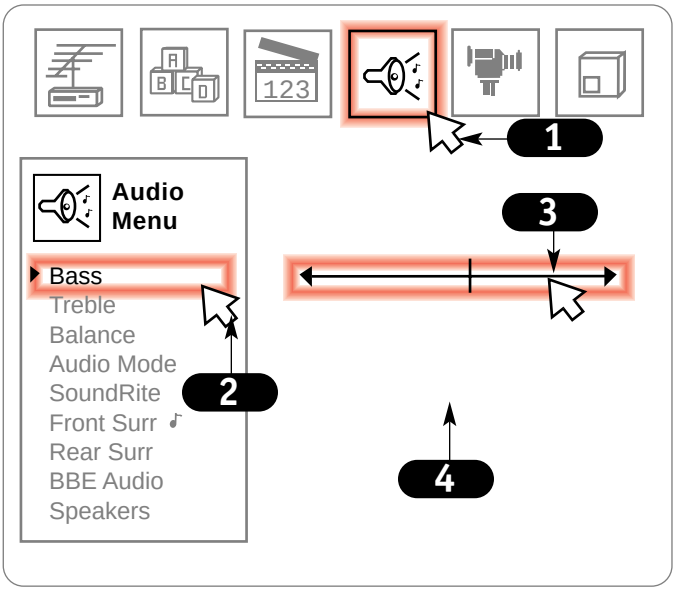
Pressing any key on the remote or front panel of your Entertainment Machine will temporarily stop the demo. To cancel the demo, you must turn off the Auto Demo.

Audio Menu

Customize the sound on your Entertainment Machine.

1 Click on your Audio Menu icon from the menu display. Your options are:

- **Bass:** Increase/decrease lower-end sounds.
- **Treble:** Increase/decrease higher-end sounds.
- **Balance:** Allows you to put the sound more to the left or right channel.
- **Audio Mode:** Choose from stereo sound, mono, or Second Audio Programming (SAP).
- **SoundRite:** Scans for changes in sound level during commercials, then adjusts the sound to match your current level.
- **Front Surr:** Turn the front surround sound speakers on or off.
- **Rear Surr:** Increase or decrease the sound level of the rear surround speakers.
- **BBE Audio:** Choose the level the BBE Sound Control is set to.
- **Speakers:** Turn the regular speakers on or off.



2 Click once on the item you want to modify to highlight it.

3 You will be able to either click directly on any part of the adjustment bar, or on arrows to increase and decrease settings one step at a time.

4 Click on the regular screen to return to normal viewing.

Not all programming is broadcast in stereo sound.

Programming that doesn't broadcast SAP may be silent when you set your Entertainment Machine on this setting.

Mini glossary

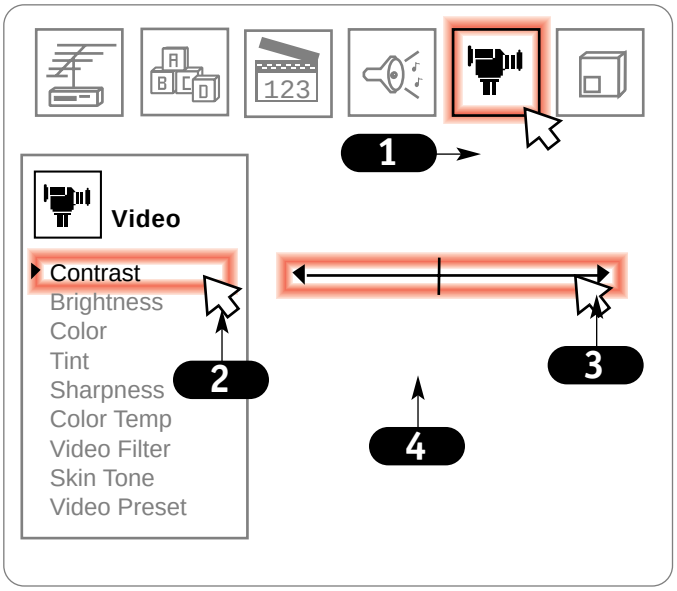
STEREO SOUND	Stereo (stereophonic) sound refers to audio that has right and left signals.
MONO SOUND	Mono (monaural) sound is one channel of sound. On more than one speaker all the speakers play the same audio.
2ND AUDIO/SAP	Second Audio Programming (SAP) is another, separate, audio channel available with some programming. Choosing SAP often refers to listening to audio in another language, such as Spanish or French.
BBE SOUND CONTROL	Expands the range of tones your sound system delivers, giving you higher highs, and lower lows.

Video Menu

Customize the picture quality on your Entertainment Machine.

1 Click on your Video Menu icon from the menu display. Your options are:

- **Contrast:** Changes the amount of difference between black levels and white levels in your picture.
- **Brightness:** Increases or decreases the amount of white in your picture.
- **Color:** Adjust levels of all colors.
- **Tint:** Adjust the relative amounts of the color red and green in your picture.
- **Sharpness:** Raise or lower the definition of the picture. The lower the level, the softer the image will appear.
- **Color Temp:** Adjust the color qualities of the entire picture at once: warm, medium, and cool.
- **Video Filter:** Reduces noise to enhance picture clarity.
- **Skin Tone:** Automatically adjusts the appearance of skin color, making it more natural.
- **Video Preset:** Choose from a range of options depending on your viewing situation. Custom uses the settings you have manually chosen, while Preset restores the levels to their original settings.



2 Click on the item you want to modify to highlight it.

3 You will be able to either click directly on any part of the adjustment bar, or on arrows to increase and decrease settings one at a time.

4 Click the screen to return to normal TV viewing.

Someone left the picture looking terrible? Just choose Preset under Video Preset to get the regular picture back quickly.

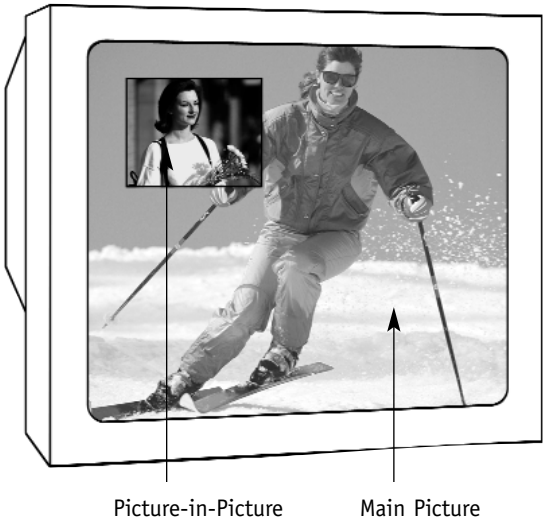
Your modified video selections can be different for each source. Modifying the settings in one source will not change settings in another source.

PIP Overview

Picture-in-picture explained.

YOUR PICTURE-IN-PICTURE FEATURE

The Picture-In-Picture (PIP) function allows you to put a smaller picture, called the "inset," on the bigger screen, or the "main" picture. Don't want to miss any of the big game, but hate commercials? Just put the game in the inset, and surf with the main picture.



2-TUNER PIP FEATURE

Normally, you would need some other piece of equipment, like a VCR, to act as a tuner to receive and display a second channel at the same time. Your Entertainment Machine eliminates that need by giving you two tuners in one TV. PIP is always available, no matter what equipment you have.

WORKING WITH PIP

This is where your MBR Trakball remote is put to the most use. All of the functions PIP has are accessible through the menus that pop up on-screen when you use your Trakball. There's more about that on the following page.

Just like your Entertainment Machine's main screen, PIP will need a source to take its image from. When you set the main screen source to Antenna/Cable 1 or 2, the PIP source will automatically set to that as well. You can adjust and/or request a different source under the Source menu (see page 20).

PIP SNAPSHOT

This feature enables you to freeze the main image into the PIP frame or view another image in the PIP frame with the touch of a button.

POSSIBLE REASONS FOR ADJUSTING PIP SOURCE

1. You use a cable box to receive premium channels, and have it "looped out" on the back of the TV. Set the PIP source to the cable box source, and the Inset will display the premium channels, which can then be swapped with the main picture.

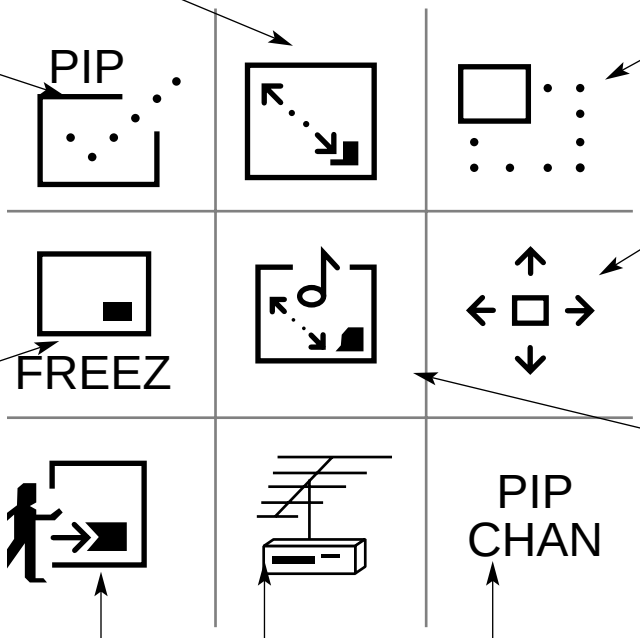
2. You want to watch a video tape, but keep scanning for another movie or game. Set the PIP source to VIDEO 1, 2, or 3 and you can watch the VCR and TV, swapping between the two.

You cannot have the Main Source from Ant/Cable 1 and the PIP source in Ant/Cable 2 or vice versa. PIP must be the same Ant/Cable source as the main or one of the video sources.

Getting the most from the PIP and other functions with your remote.

PIP/Features Menu

The PIP functions can all be found in the on-screen menu that appears when you roll the pointer to the left side of the screen.



Trakball Speed
Adjust how fast the pointer moves in relation to your moving the Trakball.

Closed Captioning
Click this to enter the closed caption menu.

Sleep Timer
Adjust the amount of time before your Entertainment Machine shuts itself off. See page 26

PIP Swap
Flips the PIP image with the main picture.

PIP On/Off
Turns the PIP function on and off. When this is on, all the following options are available. When it's off, only this option, FREEZ and Surf to PIP are available.

FREEZ
Lets you stop the image on screen. If PIP is on, the picture in the inset will freeze. If PIP is off, the main screen image will be frozen and placed in a PIP inset.

PIP Size
Choose between a large or small PIP inset picture.

PIP Move
Click on this to place the PIP anywhere. Once you click you'll be moving the PIP around. Click again to set the PIP at that location.

Audio Swap
Switches you between the sound that accompanies the main picture, and the sound for the PIP inset.

Commercial Surf to PIP
With one click this puts whatever is on the main screen into the PIP set, and lets you move through your selected surf list, for a one minute time period. It will then automatically return the picture back to the main screen.

PIP Source
Click here to set the source signal for the PIP.

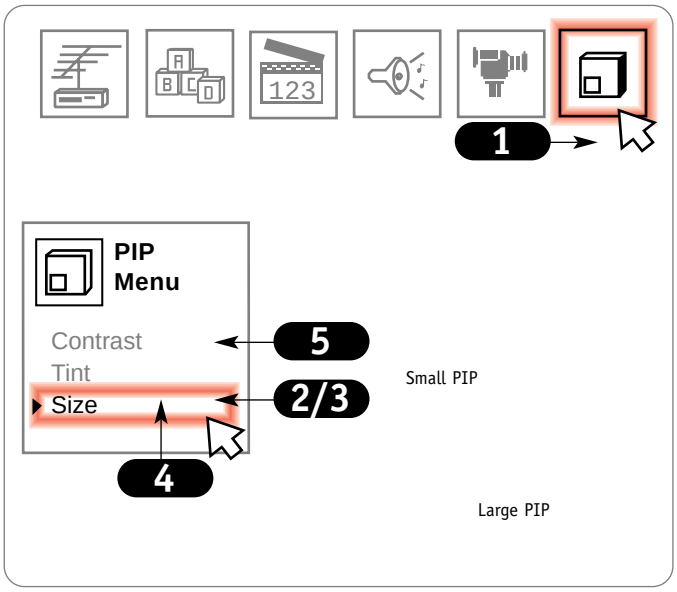
PIP Channel
Switch between channel selection for the Main and PIP images.

PIP Menu

Control the picture qualities of your PIP inset.

1. Click on your PIP Menu icon in the menu display.
2. Select Size in the menu by clicking on it once.
3. You have two sizes available for the PIP inset picture: Small and Large.
4. Select the size you want your PIP inset to be by clicking on the Size item. The inset will appear and change size to show you the difference, even if the PIP has not been turned on.
5. To adjust the other options, Contrast and Tint, click on those items.
6. Click on the regular screen to return to normal viewing. The PIP will then disappear if it has not been turned on.

Note: Contrast and Tint are adjusted the same as they are in the Video Menu, only now they affect the PIP inset image. See Video Menu page 34.



All the rest of the PIP options are available using your Trakball. See page 36 and 38 for a full description.

Mini glossary

PIP — This is the most common way to refer to the Picture-In-Picture (PIP) option.

Controlling the Main and PIP audio/video using your Trakball.

Channel/Time and PIP Display

Some functions of PIP can also be controlled using the Channel/Time display.

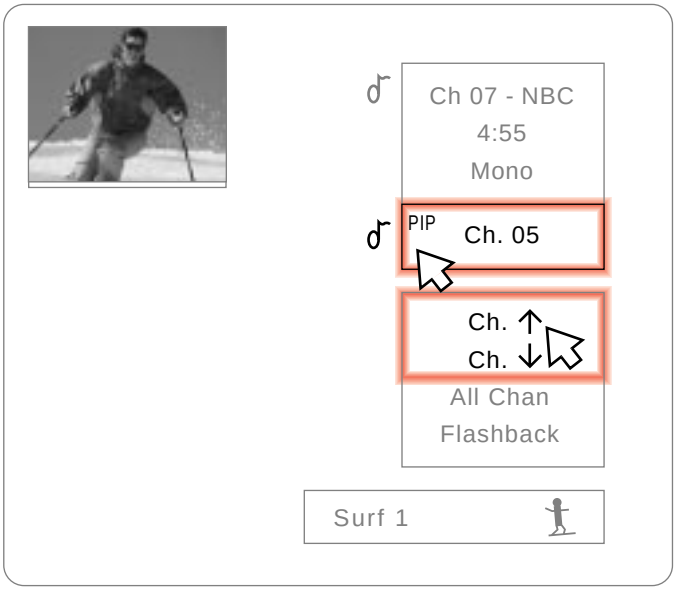
1 Turn PIP on. Click the Trakball once, and roll the pointer to the right side of the screen.

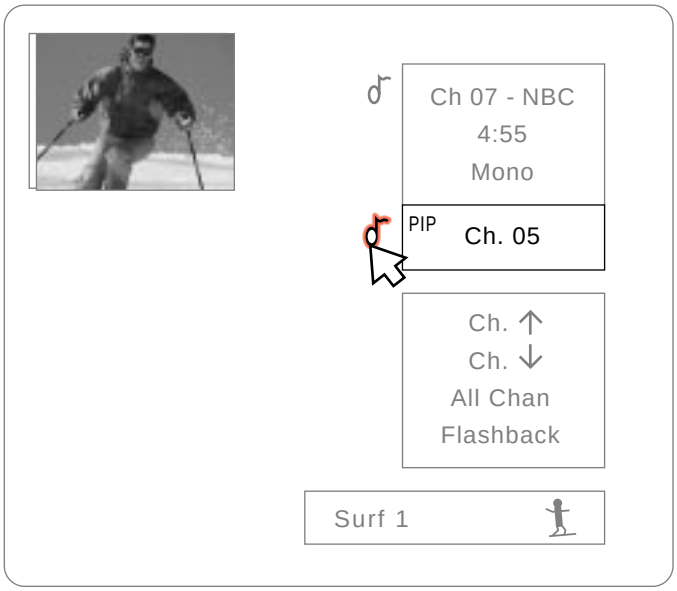
2 The display will be in two parts. The highlighted part will indicate the mode you're in (Main or PIP). Click on the darkened part to change to operating the other mode.

3 If the bottom section (PIP) is highlighted, you'll be changing stations in the PIP inset. To change stations on the main picture, highlight the top half before changing channels.

4 Instead of going to the Audio Swap option in the PIP/Features Menu, simply click on the small musical note icon on the left of the Channel/Time display. The note that is highlighted tells you which audio you are listening to.

You can be listening to the PIP audio, but still changing the main picture's channel.





Using your MBR Trakball Buttons

Using the buttons on your remote to control your Entertainment Machine.

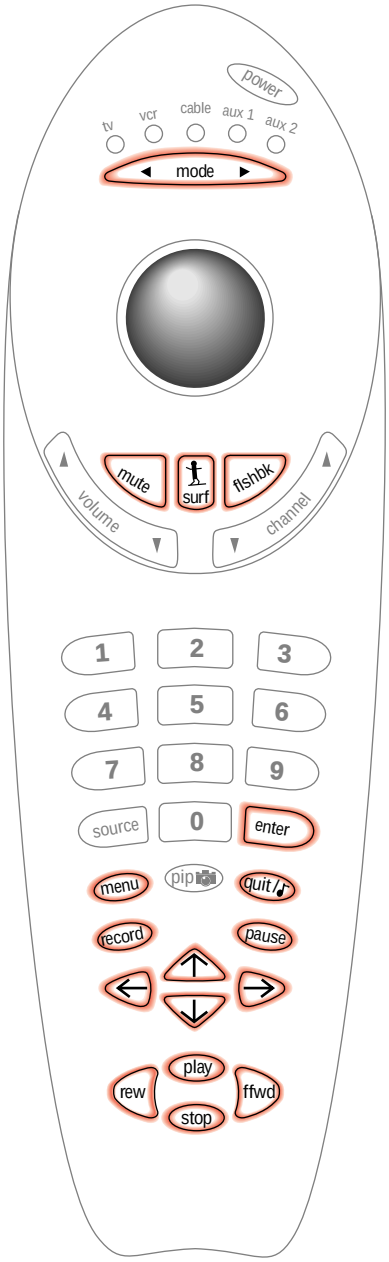
You can use most of the options on your Entertainment Machine by pressing various buttons.

MENUS
Pressing the MENU button repeatedly will cycle you through all the available menus that control your Entertainment Machine's settings.

Once in a menu, you can select an item by pressing the UP/DOWN arrows to highlight one. Then, to modify that option, you can choose it by pressing a RIGHT/LEFT arrow.

Changing labels and I.D.s require modifying options from a blue-screen menu. In these menus all four of the arrow buttons will move the cursor around the screen. Pressing FLSHBK will cycle through options where the screen indicates.

Pressing ENTER will leave your current menu, and bring up the Time/Channel Display. QUIT will leave the current menu, and take everything off your screen.



SURF
The SURF button on your remote will cycle you through your four surf menus.

The current Surf list will appear in the Surf display in lower right of your screen. Surf 1-4 means that your channel changing using the channel up or down will be limited to the channels that have been chosen for your Surf list. When the list display reads No Surfing, then all added channels will be available for you to choose from when channeling up or down.

MODE
Your remote control can operate up to five different pieces of equipment. These are called its "modes." When you are using the remote to operate your Entertainment Machine, it is in TV mode, VCR mode when operating your VCR, and so on. There are modes available to control two "Auxiliary" items. This is for an external stereo system, or simply more VCRs, a DVD, Laserdisc, or any other piece of home theater.

You can change the current mode by pressing either left or right on the MODE button. An indicator will light to show you the current mode.

VCR/DVD FUNCTIONS
The buttons at the very bottom of your remote correspond to functions for your Zenith VCR or DVD. The remote has already been programmed with the code that operates most Zenith VCRs, so you can use those buttons without have to go through the programming process. For any other brand, refer to page 43 to see how to program new codes.

Front Panel

Using the ten-button front panel to operate the menus.

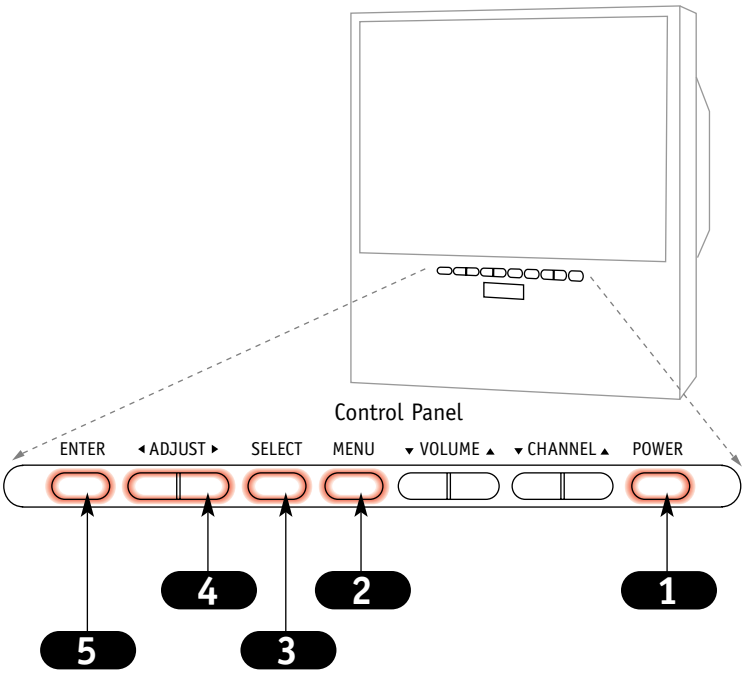
1 Press POWER on the control panel to turn on your Entertainment Machine.

2 To access the menus, push the MENU button on the control panel. Cycle through the various menus by pushing the button repeatedly.

3 Press the SELECT button repeatedly to highlight the option you want to modify.

4 Press either Right or Left on the ADJUST button to modify the option you have chosen.

5 Push the ENTER button to return to normal TV viewing.



Refer to the various pages on how to use the on-screen menus using your remote.

The CHANNEL and VOLUME buttons work just as they do on your remote control.

Lost the remote? Call Zenith at 1-800-255-6790 to ask about purchasing a new one. Any other brand besides Zenith will not perform all of the possible functions on your TV.

Programming the MBR Trakball Remote

Operate all of your home theater and stereo hardware with the MBR Trakball.

1 Select the equipment you want to program, then turn to pages 42-43 to find the programming code appropriate for the type and brand of equipment. Make sure the equipment is turned on.

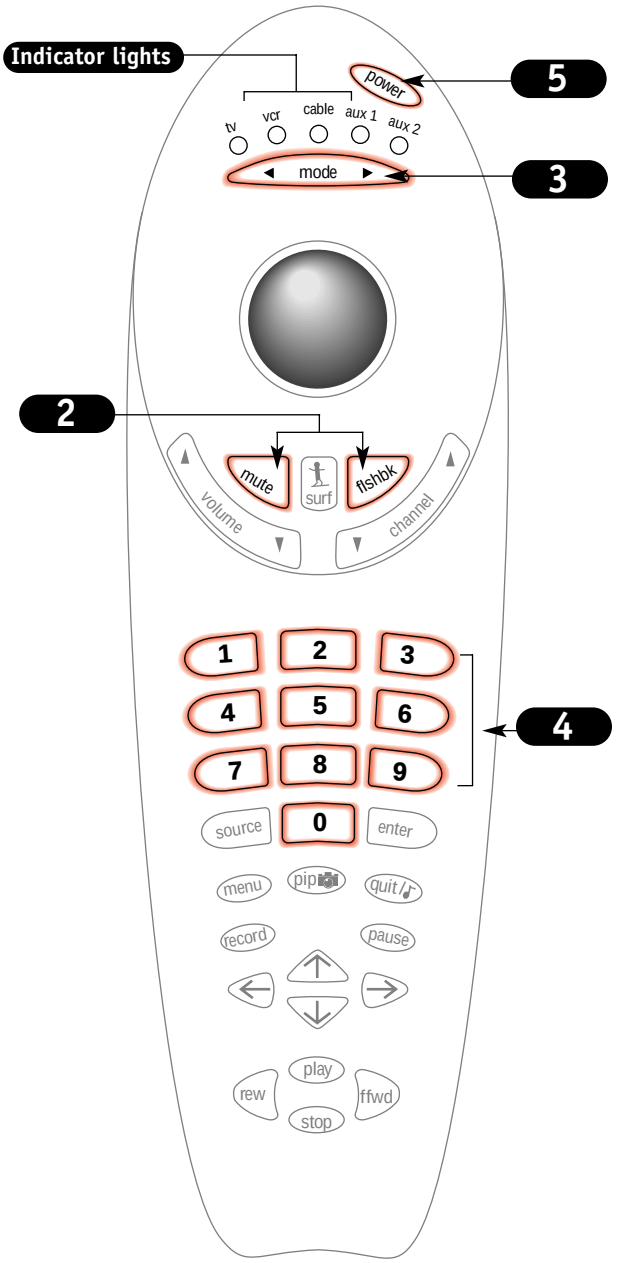
2 Point the MBR Trakball remote at the piece you're programming, and press MUTE and FLSHBK at the same time. Hold until one of the mode indicator LEDs lights.

3 Use the MODE Right/Left button to select the appropriate mode for your equipment.

4 With the Number Keypad, enter the three digit code you found in step 1 and press ENTER. If the code is accepted, the mode indicator LED will blink three times. If it is not accepted, the LED will not blink.

NOTE: The TV and VCR modes will only accept codes for those types of products. The AUX 1, AUX 2, and Cable modes will accept codes for any kind of product.

5 Push the POWER button to turn off the equipment. If nothing happens, repeat the process from step 1, and try the next code number.



To get out of Programming before you enter a code, just press the QUIT button on your remote.

Find the codes you need to program your remote.

Programming Codes

TVs

Admiral 116 121 130 133
Akai 104
Amark 103 146
AOC 104
Bell + Howell 121
Broksonic 131 136
Candle 139
Centurion 119
Citizen 121 139
Contec 141
Coronado 103
Crown 103
Curtis Mathes 116 119 121
Daewoo 149 159
Daytron 119
Elektra 121
Emerson 103 104 123 124 131 136 145 176
Fisher 109 118
GE 106 107 114 116 117 161
Goldstar 103 104 119 147 184
Hitachi 102 103 121 129 163
lnteq 101
JC Penney 104 110 114 117 119
JVC 125 132 164
KMC 103
KTV 103 104 138
Kurazai 121
LG 184
Lodgenet 121
Logik 121
LXI 119 133 137
Magnavox 103 112 113 117 119 127 128 130 139 165
Majestic 121
Marantz 104 120 155
Megatron 146
Memorex 121
MGA/Mitsubishi . . . 104 119 120 130 133 140 155 169 178
Montgomery Ward 103 104 105 113 114 119 121 130 133
NEC 104 119
Orion 176
Panasonic 106 107 160 166
Philco 103 104 112 113 139
Philips 112 113
Pioneer 135
Portland 103
ProScan 116 157 162 167
Quasar 106 107
RCA 104 116 126 157 161 162 167 168
Realistic 105 123 124
Sampo 119
Samsung 103 119 134 141
Sanyo 108 109 118
Scott 119 124
Sears 103 108 109 110 111 118 134
Sharp 103 105 122 133 137 156 169
Signature 2000 . . . 103 104 105 113 114 119 121 130 133
Sony 115 143 151 170
Soundesign 139
Sylvania 112 113 117 119 127 128 139
Tatung 106
Teknika 103 112 121 124 139
Telerent 103 121
Toshiba 110 111 134 171
XR-1000 121
Yorx 119
Zenith 101 142 149 177
Zenith StarSight . . 175

TV/VCRs

Adventura 154
Broksonic 182
Emerson 158
Daewoo 148
Funai 154
Goldstar 153
Hitachi 154
LXI 154
Magnavox 173 181
Panasonic 174
RCA 179
Samsung 180
Sansui 182
Sharp 179
Sylvania 154
Symphonic 154
XR-1000 154
Zenith 153 154 172 182 183

VCRs

Admiral 208 261
Adventura 231
Aiwa 231
Akai 223 238 241
Audio Dynamics . . 202 218 206 247
Broksonic 221 226 233 250 255
Canon 214
Citizen 209
Craig 212
Criterion 239
Curtis Mathes 214
Curtis Mathes 259
Daewoo 244 246 248 254
Daytron 236 246
DBX 202 218
Emerson 203 209 221 223 226 233 235 243 250
Fisher 211 212 213 247
Funai 231
GE 214 216 220
Go Video 256 262 263 275
Goldstar 209 273
Hitachi 215 231 257
Instant Replay . . . 214 227
lnteq 273
JC Penney 214 215 218 227
JVC 202 224 225 258 268
Kenwood 202
Logik 239
LXI 209 231
Magnavox 207 214 231
Marentz 207 218
Marta 209
Memorex 206 212 214 231
Mitsubishi 204 222 252 264
Montgomery Ward 208 214 216 219 231 249
Multi Tech 239
NEC 202 218
Optimus 208 209 259
Orion 233 250
Panasonic 214 251 259
Pentax 215
Philco 207 214
Philips 207 214 227
Pioneer 210 215
Portland 246
ProScan 216 260
Quasar 214 259
RCA 215 216 220 227 240 242 249 260 267
Realistic 206 208 212 214 231
Samsung 220 230 238
Sansui 239
Sanyo 206 212 247
Scott 204 205 233 243
Sears 206 209 211 212 215
Sharp 208 261 272
Shintom 239
Signature 2000 . . . 208 214 216 219 231 249 261
Sony 232 274
Sony Beta/VHS . . . 237
SonyVideo8 217
Sylvania 207 214 227
Symphonic 231
Tashiko 209
Tatung 202
Teac 202 231
Teknika 209 234
Toshiba 205 215 271
Vector Research . . 204 218
XR-1000 239
Yamaha 202 218
Zenith 201 224 225 229 273
Zenith Beta 237

Programming Codes

Find the codes you need to program your remote.

CABLE/SATELLITE/SET-TOPS

Allegro 358 362
Allegro A-B Switch 361
Americast 383
DISH Network Satellite 389
GE 367
Gemini 305 331 338
General Instrument 304 305 306 307 308 309 310 318
Hamlin 302 303 345 365 366
Hitachi DSS 392 393
Hughes DSS 392
Jerrold 304 307 308 309 310 318 360 363 382
JVC Satellite. 389
Kale Vision. 335
Macom 321
Macom Satellite . . 314
Magnavox 334
Magnavox DSS . . . 390
NSC 335 339 368 369 370
Oak 311 332 342
Panasonic 313 320
Panasonic DSS . . . 386
Paragon (Zenith) . . 333
Philips 347 350 352 354 355
Pioneer 315 343
Primestar Satellite 388
RCA DSS 373 394
Radio Shack 362
Regal 366
Regency 329
Samsung 335
Scientific Atlanta 316 323 336 364
Sony DSS. 387
Sprucer 313
Standard Comp . . . 335
Stargate 379
Texscan 339 356 371
Tocom. 317 318 346
Toshiba DSS 391
Unika 348
Unika 362
United Satellite . . 344
Universal. 358 362
Vid Tech 340
Video Way 349
Viewstar 354 355 369 372
Zenith. 301
Zenith HT-2000. . . 353
Zenith PM 374
Zenith Drake Satellite 312 330
Zenith HD Set-Top 385
Zenith N|C Set-Top. 384 395
Zenith Satellite. . . 328 351 378

LASER DISC PLAYERS

Denon. 402 403
Mitsubishi 403
Panasonic 405
Pioneer 402 403
Sanyo 401
Sony. 404
Zenith. 401

AUDIO TAPE DECKS

Denon. 455
Harman/Kardon. . . 456
JVC 457
Kenwood 450
Onkyo 458
Philips DCC 454
Pioneer 451 478
Sony. 452
Technics 497
Technics DCC 454
Yamaha 453

AUDIO CD PLAYERS

Akai 409 424
Carver. 510
Crown 410
Denon. 411
Fisher 412 438
Goldstar 460
Harman/Kardon. . . 413
JVC 415
Kenwood 412 416 417 441
Magnavox 421 422 433 434
Mitsubishi 423 424
NAD 425 426 447
Nakamichi 427 428
NEC 429
Onkyo. 430
Panasonic 431 432
Philips 421 433 434
Pioneer 431 435
Quasar 432
Radio Shack 431 436 439 440 441
RCA 437
Sanyo 438 439
Scott 440
Sharp 441 442
Sony. 443 444 445
Soundesign 461 498 501 502
Sylvania 433
Teac 446
Technics 432 459
Toshiba 447
Yamaha 448
Zenith. 460 461 498 501 502

DVD PLAYERS

Denon. 523 524
Marantz. 521
Mitsubishi 525
Panasonic 523 524
Philips/Magnavox 521
Pioneer 527
Proscan 526
RCA 526
Sony. 522
Toshiba 521
Zenith. 521

AUDIO TUNER AND AMPLIFIERS

Carver. 510
Denon. 462 463
Fisher 464 505
Goldstar 460
Harman/Kardon. . . 465
JVC 466
Kenwood 468 469 506
Marantz. 472 503
Onkyo 473
Panasonic 507
Philips 475 476
Philips/Magnavox 505
Pioneer 477 478 479
Radio Shack 487 488
RCA 508
Realistic 480
Sanyo 481
Scott 482
Sharp 483
Sherwood 487 488
Sony. 489 490 491 492
Soundesign 461 498 501 502
Teac 494 495
Technics 497 507 509
Yamaha 496
Zenith. 460 461 498 501 502 504 505

Auto Find

Use the Remote control to search for all possible programming codes.

1 Turn on the device you want to operate.

2 Press and hold the MUTE and FLSHBK buttons until the indicator light turns on.

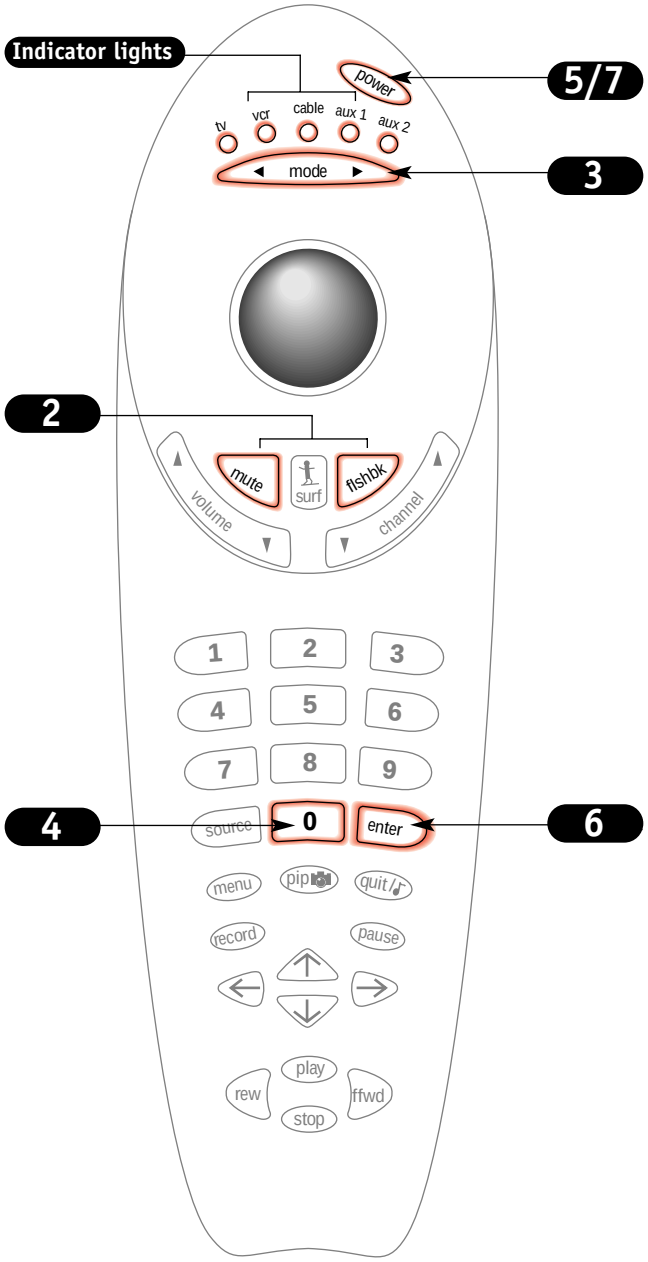
3 Press MODE Left/Right until the indicator light is underneath the device you're trying to program (TV, CABLE, VCR, AUX).

4 With the NUMBER keypad, enter the code 0-0-0 (zero-zero-zero), then press the Enter key right away.

5 Aim the remote at the correct device and push the Power button. Allow a second to pass, then push the Power button again. Repeat until the device turns off.

6 Push Enter to save the code. The indicator light on the remote will blink three times and then turn off.

7 Press Power to turn the device back on.



You can get out of Auto Find quickly by pressing the Quit button.

If the indicator light does not turn off while you push the Power key, all the codes have been tried and your device can't be programmed.

Amplifier/Cable Volume Override

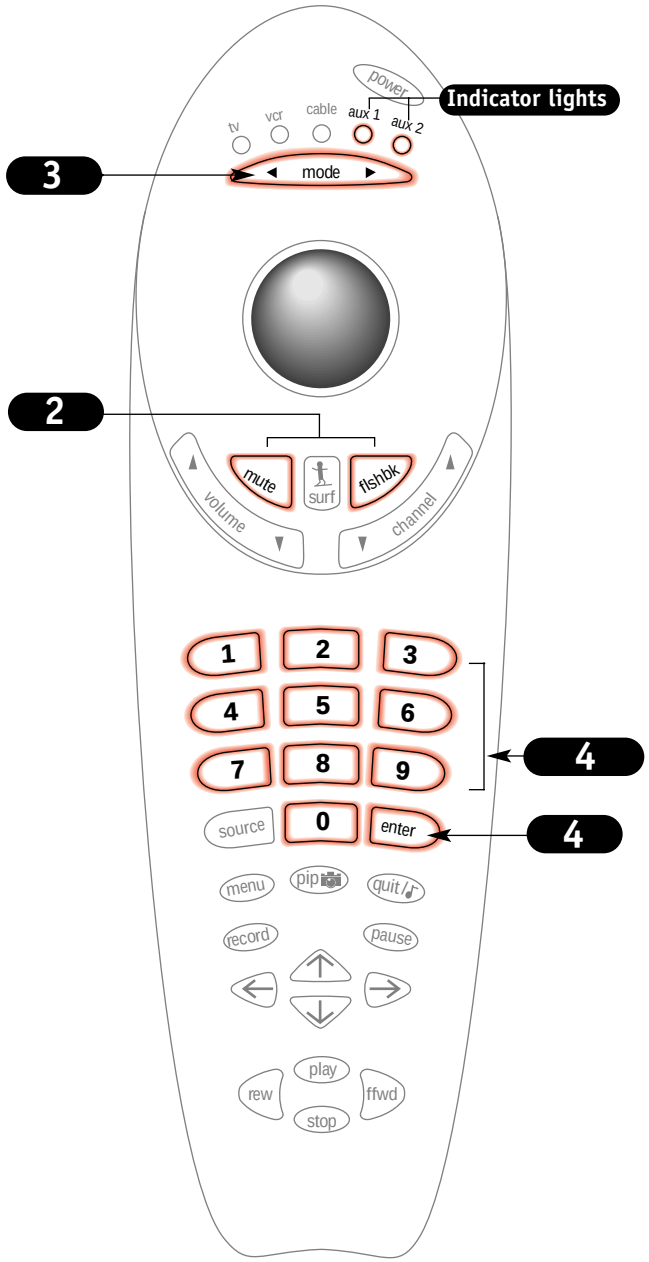
Control the volume on your sound amplifier while in other modes.

Amplifier Volume Override:

1. Find the code that operates your amplifier. Test it to make sure it's the correct one by following the procedure in the "Programming Your Remote" section.
2. Press and hold MUTE and FLSHBK on your remote until the indicator light stays lit.
3. Press MODE Left/Right until the indicator light is under the mode that you want Amplifier Volume to appear, for example, TV.
4. Enter the special code: 4-9-9, then quickly press the ENTER button. (The indicator should blink and then turn off.)

Cable Volume Override:

1. Find the code that operates your cable box. Test it to make sure it's the correct one by following the procedure in the "Programming Your Remote" section.
2. Press and hold MUTE and FLSHBK on your remote until the indicator light stays lit.
3. Press MODE Left/Right until the indicator light is under the same mode that you chose in step one.
4. Enter the special code: 3-9-9, then quickly press the ENTER button. (The indicator should blink and then turn off.)



Your volume and mute keys now control your amplifier, while all the other keys still operate the Entertainment Machine. To change everything back to default, reprogram all buttons with their original codes. See the "Programming Your Remote" section, page 41.

If you can't find the code for your amplifier, use the Auto Find feature.

Caring for your Entertainment Machine.

Maintenance

Careful and regular cleaning can extend the amount of time you will have with your new Entertainment Machine. Be sure to turn the power off and pull out the plug before you begin any cleaning.

SCREEN CLEANING

1 Spray a small amount of glass cleaner on a soft cloth and wipe the screen until it's clean.

2. Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.

3. Make sure the excess water is off the screen, and then let it air-dry before you turn on your Entertainment Machine.

CABINET CLEANING

1. Use a soft cloth with a mild soap solution to wipe the cabinet (avoid using any cleaner that says "industrial strength" on the label.

2. Rinse the cloth and wipe the cabinet again.

3. Let the cabinet air-dry before turning the Entertainment Machine on.

EXTENDED ABSENCE

If you leave your Entertainment Machine dormant for a long time (such as a vacation), it's a good idea to unplug the power to protect against possible damage from lightning or power surges. If you use an off-air antenna, you may also want to disconnect it from the back of your Entertainment Machine before leaving.

PICTURE INTERFERENCE

Even though you may be getting cable, the signal may be weak, which means the quality of your picture may suffer due to other factors. If there are problems with the image on your Entertainment Machine, consult the Troubleshooting guide on the following pages.

VIDEO GAMES AND OTHER FIXED-PATTERN DISPLAYS

If you use your Entertainment Machine to play video games or for other uses that have single, fixed images, such as a photo-CD player, you should avoid setting the Brightness level too high. If static images, like network identification patterns, are left sitting for too long, they can leave a permanent impression on the picture tube. You can reduce the chance of this happening by limiting the amount of time you use the fixed-image display, and by reducing the contrast and brightness levels or using the Game preset.

CLEANING THE TRAKBALL

Sometimes the Trakball gets greasy or dirty, which can affect it's performance. To clean it, moisten a cloth with a solution of dish washing detergent and water. Gently wipe the exposed area of the Trakball, rolling it with your thumb. Allow the remote to dry before using it again.

NOTE: Do NOT use alcohol or other "cleaning fluids" anywhere on the remote control.

If you unplug your Entertainment Machine, you may have to reset the clock using the Clock Set menu described earlier.

Troubleshooting

Some quick and easy tips to fixing problems yourself.

SYMPTOMS	SOLUTIONS
Snowy picture and unclear sound.	• Check your antenna connection or location • Check your cable input. • Check to see if the TV/.VCR button on your VCR has the TV selected.
Multiple images or 'ghost shadows.'	• Check your antenna direction and/or location. • Check your cable input • Make sure the cable from your antenna to your Entertainment Machine is properly connected.
Interference: Sharp lines across the screen and lousy sound.	*The following may cause image problems or distortion: Electrical appliances, powerful lights, cars, trucks; computers or portable phones; medical equipment* • If possible increase the distance between your Entertainment Machine and the offending appliance. Or shut one of them off.
Normal picture but no sound.	• Check volume levels. • Make sure the TV is not Muted. • Try another channel. The problem may be the broadcast, not your Entertainment Machine. • Are the Audio A/V cables properly installed? • Are the wires for external speakers (if you have external speakers) properly installed? • Make sure your speakers are turned on under the Audio menu. • If your audio mode is set to SAP, that channel may not have a SAP program.
No picture and unclear sound.	• Are you in TV or cable tuning mode, and should be in the other? • Make sure output channels on all A/V equipment are on the same channel (3 or 4). • Check that all connections are tight.
No picture and no sound.	• Is the AC power plugged in? • Check that your AC power outlet works. (Test it by plugging in something else or try another plug.) • Make sure your brightness and audio controls are set properly. • Try another channel. The problem may be with the broadcast.
No color, but the sound is O.K.	• Check the color control in the Video menu. • Try another channel. The problem may be with the broadcast.
Picture has a big black box on it, but the sound is O.K.	• The CC (closed caption) option may be in Text mode. Select Caption 1, or OFF in the Captions/Text menu.(See page 25).
Picture has two horizontal black bars, one on top and one on bottom.	• Your program is in letterbox. This means that the shape of your TV is a square, but the program is a rectangle. Think of the bars as empty space the program doesn't fill; not picture that's blocked out. Because this format is a direct representation of film as you see it in the movies, you are actually seeing MORE of the program when you see those bars. Trust us.

Troubleshooting, cont'd

Some quick and easy tips to fixing problems yourself.

Remote control doesn't work.	• Make sure the batteries are fresh and installed properly.
Indicator light on remote comes on but remote doesn't transmit.	• Make sure the batteries are inserted in the remote properly.
Menu options can't be changed or selected.	• Try unplugging your Entertainment Machine for a few minutes, then plug it back in.
No picture or sound when any non-cable source is selected.	• Check to see if the source equipment has been turned on. • Make sure that the connections are secure on the back of your Entertainment Machine and on the source equipment.
Weak or no Stereo Sound when using a stereo VCR.	• Check to see if all the connections are secure. • Look in the Audio mode menu to see if all the settings are correct. • You are using channel 3 or 4 to view your VCR. No stereo sound is present under that decision.
Desired PIP source is not selectable.	• Your Entertainment Machine automatically sets the PIP source to Antenna/Cable 1 or 2 if that is the source for the main picture.
The PIP inset is black or lacks contrast .	• You might want to adjust the PIP picture settings under the PIP menu. • Check that all the wires are connected properly. • Check to see if your input source for PIP is set correctly.
The PIP inset is "snow" when the source is Ant/Cable 1 or 2.	• Look to see if the TV/VCR button on your VCR has the TV selected.
Time is incorrect.	• Automatic: Check to see if PBS Channel is correct and then check Time Zone/Daylight Savings time settings under Clock menu. PBS station may not be broadcasting time data (use manual setting). • Manual: Make sure the time was set initially. Probably power was lost.

If all else fails, call 1-800-365-1690 Mon-Fri 7:00 am and 8:00 pm and Sat. 8:00 a.m. and 5:00 p.m. CST.

Special Features

Here are a few features that make your Entertainment Machine more fun to use.

ADVANCED SURF
In addition to your normal channel listing, you can customize up to four different channel lists to fit different members of your family: movie channels for the kids, the sports channel for Dad, etc. See page 24 to set up surf channel lists and page 30 to customize the names of your channel lists.

PIP SNAPSHOT
With the press of a button you can freeze the image from your main screen into a large PIP inset. Pressing the button a second time enables normal PIP viewing. Pressing the button a third time removes PIP from the main screen. See pages 35-37.

AUTOMATIC TIME SET
You can have your Entertainment Machine read a signal sent over PBS broadcasts, and set the time and date automatically. See page 22.

CHANNEL LABELS
Instead of leaving it up to channel numbers to let you know what you're watching, you can choose labels for the various channels (HBO, CNN, ABC, etc.). You can also let the Entertainment Machine use the labels that some stations broadcast themselves. See Channel Labels, page 28.

SOURCE ID CUSTOMIZING
If you have a number of other pieces hooked up to your Entertainment Machine, instead of trying to remember the name of the jack you hooked them up to, just refer to page 29 to customize the name of the equipment as it shows up under the Source Menu or on your Channel/Time display.

PARENTAL CONTROL
Using a password-protection system, parents can block a channel that they don't want their kids to be watching. See page 31.

2-TUNER PIP
Televisions require to a tuner to turn signals into watchable programs. Conventional TV's only have one tuner, and require another machine, such as a VCR, to receive another set of signals to use Picture-In-Picture. Your Entertainment Machine has a second tuner built right in, so there is no need to rely on other equipment for your PIP display. See PIP overview on page 35.

AUTO DEMO
To familiarize yourself with the layout of all your menu options and choices, Auto Demo can be turned on. It will cycle through all the menus, displaying them on your screen for a few seconds. See page 32.

Glossary

A complete list of definitions for words found in this guide.

2-TUNER PIP	This features allows you to view a second channel while maintaining a picture on the main screen.
75 OHM RF CABLE	The round cable that comes from an off-air antenna or cable service provider. Each end looks like a hex shaped nut with a wire sticking through the middle, and it screws onto the threaded jack on the back of your TV.
A/V CABLES	Audio/Video cables. Three cables bunched together—Right audio (red), Left audio (white), and Video (yellow). A/V cables are used for stereo playback of videocassettes and for higher quality picture and sound from other A/V devices.
A/V DEVICE	Any device that produces video or sound (VCR, DVD, cable box, or television).
ADD	This function lets you add new channels to the list that you'll scroll through when using your remote.
AMPLIFIER	An external machine that amplifies sound from a television, CD player, VCR, DVD or other A/V device.
ANTENNA	The physical receiver of television signals sent over the air. A large metal piece of equipment does not always have to be visible for your home to be using an antenna.
BBE SOUND CONTROL	Expands the range of tones your surround sound system delivers, giving you higher highs, and lower lows.
CAPTIONS	A form of subtitling that writes out the dialog for your program.
CAPTIONS WHEN MUTED	Sets captioning to come on automatically when your volume is soft muted or muted.
CLICK	The act of pressing the Trakball on your remote to perform highlighting, and activating a particular function/feature.
CONVERGENCE	This option lets you correct for color separation in your picture.
DATA PORT	A jack for hooking up optional equipment that gives you access to the Internet through your TV.
DAYLIGHT SAVINGS	"Observed" means that your Entertainment Machine will adjust your time setting at the appropriate times of the year. "Not Observed" will not. Set this depending on whether your viewing area uses Daylight Savings or not.
DELETE	This function lets you remove channels that you don't watch from the list you'll scroll through.
ICON	A small graphic item on your screen that represents a function or menu item.

Glossary, cont'd

A complete list of definitions for words found in this guide.

INPUT Refers to the jack that receives a signal into the TV, VCR or other A/V device.

JACK A connection on the back of a TV, VCR, or any other A/V device. This includes the RF jacks and the Audio/Video jacks that are color-coded.

MODE The mode determines the type of device (TV, VCR, Cable, Aux) that the remote is controlling.

MONO SOUND Mono (monaural) sound is one channel of sound. On more than one speaker all the speakers play the same audio.

OUTPUT Refers to the jack that sends a signal out of a VCR, DVD, or other A/V device.

PIP This is the most common way to refer to the Picture-In-Picture (PIP) option.

PIP SNAPSHOT Press to capture and freeze main picture within large PIP frame. Press a second time and receive normal PIP from another channel. Press again to remove PIP from the screen.

POINTER The image of the hand that appears on-screen and points to the option you want to work with.

SECOND AUDIO PROGRAMMING/SAP Second Audio Programming (SAP) is another, separate, audio channel available with some programming. Choosing SAP often refers to listening to audio in another language, such as Spanish or French.

SIGNAL Picture and sound traveling through cable, or on the air, to your television screen.

SOURCE The term for the equipment that provides audio and video information to your Entertainment Machine. Antenna, VCR, DVD players, or Cable Boxes are examples of sources.

STEREO SOUND Stereo (stereophonic) sound refers to audio that's divided into right and left sides.

SURF This function creates a customized list of your favorite channels. You can access this group of channels by pushing the surf button on the remote.

TEXT Arbitrary text not related to the program.

TUNER Any device that picks up broadcast signals and turns them into picture and sound.

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Find what you want quickly.

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To reach Zenith, call 1-800-365-1690, Mon-Fri. 7:00 a.m. and 8:00 p.m. and Sat. 8:00 am and 5:00 pm CST.

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Direct-View Color TV Welcome into the Zenith family! We believe that you will be pleased with your new Zenith Entertainment Machine. Please read this warranty carefully, it is a "LIMITED WARRANTY" as defined under Federal Law. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state within the U.S.A.

ZENITH RESPONSIBILITY

Service Labor During a period of 90 days from effective warranty date, Zenith will provide service labor by a Zenith authorized service center when needed as determined by Zenith, as a result of manufacturing defects.

Parts New or remanufactured replacements for factory-defective parts will be supplied by a Zenith authorized service center for one year from effective warranty date (color picture tube — two years). Such replacement parts are warranted for the remaining portion of the original warranty period.

Home Service Warranty service for 21" diagonal (U.S.A.) or larger screen size models is provided in the home in most cases. (Some repairs may require the unit to be taken by the servicer to the repair facility and returned, at no additional charge.)

Not Covered This warranty covers manufacturing defects and does not cover installation, adjustment of customer controls in the home, installation or repair of home antenna systems, cable converters or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God or other causes beyond the control of Zenith. Any alteration of the product after manufacture voids this warranty in its entirety.

OWNER'S RESPONSIBILITY

Effective Warranty Date Warranty begins on the date of original consumer purchase. For your convenience, keep the dealer's dated bill of sale or delivery ticket as evidence of the purchase date.

Operating Guide Read your Operating Guide carefully so that you will understand the operation of your set and how to adjust the customer controls.

Carry-In Service Models under 21" diagonal (U.S.A.) screen size must be taken to a Zenith authorized service center for warranty service and must be picked up by the owner.

Antenna Reception problems caused by inadequate home antenna or faulty antenna connections are the owner's responsibility.

Important Product Registration—Please fill out and mail your Product Registration Card. It is imperative that Zenith know how to reach you promptly if we should discover a safety problem that could affect you.

Warranty Service For warranty service information, contact any Zenith authorized service center. Parts and service labor that are Zenith's responsibility (see above) will be provided without charge. Other service is at the owner's expense. If you have any problem in obtaining satisfactory warranty service, call or write the Zenith Response Center. You must provide the model number, serial number and date of purchase or date of original installation. Before you ask for warranty service, read "Maintenance And Troubleshooting" in your operating guide. You might avoid a service call.

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Be sure to send in the Product Registration Card. We will send you an application for the Protection Plan near the expiration of the two-year manufacturer's warranty on the picture tube. For additional information call (847) 391-8757.